REPORT

OF THE

New York & Honduras Rosario Mining Company

NEW YORK, DECEMBER 1st, 1904.

OFFICERS 1904-1905.

W. S. VALENTINE, *President.*

H. G. B. FISHER, *Vice-President*

L. L. CLARKE, *2nd Vice-President.*

S. HEIDELSHEIMER, *Treasurer.*

ERNEST SCHERNIKOW, *Secretary.*

BOARD OF DIRECTORS 1904-1905

H. H. BABCOCK.

L. L. CLARKE.

H. G. B. FISHER.

S. HEIDELSHEIMER.

F. H. PARKER.

E. J. SWORDS.

W. S. VALENTINE.

P. R. WEILER.

N. WESTHEIMER.

EXECUTIVE COMMITTEE 1904-1905.

FORREST H. PARKER, *Chairman.*

L. L. CLARKE.

S. HEIDELSHEIMER.

P. R. WEILER.

N. WESTHEIMER.

REPORT

OF THE

New York & Honduras Rosario Mining Company

NEW YORK CITY, N. Y., December 1st, 1904.

To the Stockholders:—

This annual meeting marks the entrance of the quarter century of our existence as a corporate body. It presents many subjects for mutual congratulation. At the same time it recalls many difficulties, many discouragements, many epochs whose events were sad and prospects black.

The dark period of our efforts seems now to have definitely passed, without even development of, or working, the major part of your property.

Twice durng the past year we have issued letters to the stockholders advising the progress made.

TERRITORY.

When in 1880 the Company was incorporated it bought the then Rosario Mine, consisting of six holdings, each 600 yds. long by about 200′ wide, somewhat less than 500 acres. Accretions thereto by Government grant and purchase have increased the territory to over 12,000 acres (20 square miles).

RIGHTS.

In the territory you own, in absolute, all mining, timber and water rights, in fact everything of value in the district was secured.

ADDITIONAL RIGHTS.

By purchase you have acquired the timber rights in the adjoining towns of Cantarranas and Valle de Angeles, thus securing adequate wood supply for many years, beyond what may become necessary by increase of working facilities.

MINING.

Our work was begun by driving two levels with hand drills and the ore was carried out on men's backs. The improvements on these methods were necessarily gradual. Later on the tunnels and connections were increased and driven by compressed air drills; transportation was accomplished by small mine cars running on wooden rails with iron straps. To-day you have 16 levels, 100 feet apart, with regular connections. The deepest level runs about 1½ miles into the mountain.

PRESENT FACILITIES.

At the present time, instead of frequent and consequently expensive handling of ore, it is dumped about 1,500 feet from the uppermost connected level to the lowermost (650 foot) level.

The main levels are tracked with steel rails on which standard size steel mine cars run. The main level has a trolley line, which by force of a 50 H. P. electric engine hauls out all the ore and delivers it to the Bucket Cable Tramway, whence it is carried by gravity to the mill, a distance of 1¼ miles.

THE MILL.

In 1882 you erected a Kendall Mill of 10 stamps, each of 300 pounds. This Mill, however, was substituted later by two 5 stamp batteries of 650 pounds each, with 4 amalgamating pans and 2 settlers. In 1885 you added 2 more batteries, 4 pans and settlers. On November 25th, of that year, the entire plant was almost entirely destroyed by fire. The Mill was quickly rebuilt and on January 1st, 1886, ten stamps were again operating. Progress of development and increase of

ore-production demanded augmentation of milling power, until you had 35 stamps and 8 pans at work.

On penetration of the mountain's depths, baser ore was encountered and where formerly the output had been free milling, that then obtained demanded concentration and required the addition of Frue Vanners.

About two years ago the situation became critical. Not only was it necessary to stop paying dividends, but to make ingression upon the reserve fund. Your Board of Directors resolved to have an investigation made, and, if necessary, to change the management. For this purpose the services of Louis S. Noble, Esq., E. M., of Denver, Colorado, were enlisted and the causes of this untoward state were made manifest in his report; a copy of this report was sent to each stockholder. In it Mr. Noble emphatically condemned the manner of conducting the business and advised radical changes in all branches thereof. In accord with these recommendations, the then Manager was relieved and Mr. J. H. Weddle, of Colorado, was appointed.

In the Mill concentration before amalgamation was introduced. To do this, great changes were necessary; instead of the Frue Vanners, the more modern Wilfley Tables were introduced. The original 650 pound stamps, which wear had reduced to 600 pounds, brought about a loss of about 7½% of the Mill's capacity. To remedy this the stamps were weighted with heavier heads, which brought them up to about 690 pounds weight.

Increased Mine tonnage obliged increased milling capacity. The mortars were therefore changed from single to double discharge and two further batteries were added which made 9 double discharge batteries consisting of 45 stamps. The addition of pans, settlers and concentrating tables during the year brought the capacity from 1,500 tons per month last year to 2,400 at the present time.

The limits of milling capacity have now been reached, owing to the plant's location. It does not admit further cutting into the side hill, against which the present building rests. The near future, however, will demand decided increase of milling capacity; to meet this necessity plans are being formulated, as will be shown further on.

With the view to bringing the production to the most modern, most economical and consequently most profitable results, investigations of new methods are continuously being made. Among these the newest Cyanide test plant, recently shipped from San Francisco, is now subjected to investigation

at the Mill, to learn if the ore can be treated economically by this process.

FIRE APPARATUS.

Every precaution has been taken to avoid the danger of fire. We have in and around the Mill and other buildings 27 2″ standpipes, with hose and 1½″ nozle. They work under a pressure of from 120 to 150 lbs. The equipment is all of standard size and therefore interchangeable.

LIGHTING.

Your property is lighted throughout with electric light, the town of San Juancito, the buildings and shops with sufficient arc lamps, the mill, works, machinery and offices with incandescent lamps, thus the prime danger of fire is eliminated.

RECENT RESULTS.

While the Bullion production has steadily improved and profits increased, most of the results during the beginning of the year were necessarily directed to betterments in machinery and plant and to improved methods, as also to replenishment of the reserve fund. The most important improvements in the Mill have been made, and it is in as good a state as possible; the reserve fund has again reached its normal figure and dividends have been paid.

The Treasurer's Report will show your financial condition.

THE MINE'S PHYSICAL CONDITION.

The report of our Manager, Mr. J. H. Weddle, details the present state of the Mine. Among other points therein, the vast improvements in methods of ore transportation, drainage and ventilation, merit special attention.

ORE RESERVES.

Mr. Weddle's report shows that these are larger than ever before. They have been so developed as at all times to be available, and so prepared that no time will be lost in meeting such demands as may be made by increased milling capacity.

MINE WORK.

This consisted chiefly in following the ore-bodies in the original holdings and extensions thereof. The excellent results made it appear wise to concentrate all available force thereon. This entailed leaving for future consideration many other parts of the property which are equally well mineralized. Among these is the adjoining territory, formerly known as the "Zelaya property," part of which was purchased in 1891 and the remainder in 1898, altogether for the sum of $175,000.00. Your main works were driven through the Zelaya property, but no other important developments thereon were made, except that, during the year past, the Colonia vein thereof was developed and proved of high grade. Recently it aided very much in furnishing ore to the Mill. In the Manager's opinion, this vein alone will soon repay the entire cost of the Zelaya property.

Numerous other veins in this "Zelaya property" give indications that demand prospecting and developing as quickly as facilities can be made.

So many matters in the established works demanded immediate attention and all available labor being required for making it safe and profitable, justice could not be done the newer parts during the year past. However, plans therefore are being matured which justify the hope of larger discoveries therein during the coming year.

To benefit as much as possible by the present condition at your property, a colony of Italian Miners has recently been sent there. As this is the best class of foreign labor and readily harmonizes with native employees, anticipations of good results of their work are fully justifiable.

At the same time all other native and foreign miners who make application for work are employed. To accommodate the increase of laborers, huts are being built for them at the Mine itself.

These improvements, it must be understood, do not presage immediate increase of Bullion production, nor immediately increased dividends. In reality they represent a rather material increase of expenses. But with the Mill now running to its fullest capacity, provision for the future by larger ore reserves must be made, so that whatever augmentation of milling power be determined upon, it never need be arrested by lack of available ore.

PRESENT NEEDS.

The most salient of these, at the present time, is a new modern mill of a capacity that will keep pace with the developments. The study of a site therefore is in progress, both by your Manager at the Mines and your Board of Directors. The proper selection is rendered necessarily slow by the cautious conservatism with which your work is conducted.

The construction of a new mill does not embrace the discarding of the present one. The intention is to maintain it in such a condition that it may serve in the event of an accident to the proposed new mill and in the future to use for milling the large blocks of low grade ore still in the older parts of the mine.

The establishment of a system of electric transmission of power to all parts of your property is contemplated in connection with the proposed new mill. The studies are directed toward substituting one central station for the present numerous water wheels at various stations.

Your assistant manager, Mr. E. A. Hardy, is in the field with a competent staff exploring the water courses to ascertain the most favorable site for the erection of a power house. With this, one crew of men will be able to distribute the power as and where it is needed. The resultant economy is too evident for discussion.

SUPPLIES.

Your various departments are liberally supplied with all necessary material of current use; spare parts of all machinery are in stock and a full reserve supply of tools constantly on hand.

Recently, heavy rains have impaired the crops, menacing Honduras with a shortage in the necessities of life in the coming year and corresponding increase in the prices thereof. To protect your employees, the shipping of corn, beans, rice and lard has begun.

Your employes are of the highest class of workers in all departments.

POLITICAL DISTURBANCES.

The frequent and exaggerated reports of revolutions in Honduras are always to be anticipated "CUM GRANO SALIS." Whatever they may have been, in fact, they in no wise disturbed the progress of your work.

GOVERNMENT AMITY.

Our relations with the Government of Honduras are the most amicable. You enjoy the fullest support of all heads of departments who further your interests in every possible manner, as they always have done, whatever the prevalent political condition.

STANDING.

The Company's credit in Honduras is such that its drafts are commercially held to be the most desirable that can be obtained.

LOCAL MANAGEMENT.

The Board of Directors feels that it may cordially congratulate the Stockholders of having the property under such careful and capable management as it receives at the hands of Mr. J. H. Weddle, to whom every credit must be given for the present excellent condition of your Mines, both for the present and future uses, and to the able assistance he has from all the heads of Departments.

Confidently looking forward to the ability to present even more satisfactory annual reports, this one is respectfully submitted.

W. S. VALENTINE,

President.

San Juancito, Honduras, C. A., October 30th, 1904.

To the President,

New York & Honduras Rosario Mining Co.,

New York City.

Dear Sir:—

Covering the operations of your property in Honduras for the year ending October 1st, I have the honor to submit for your consideration the following:—

GENERAL.

During the greater part of the past twelve months both Mine and Mill have run constantly, although our work suffered from accident and delays; an unusually heavy rainfall during June and July damaged the Flumes, washed out our mountain roads, and made it difficult to bring in enough heavy timber to supply the Mine. The road to the Coast became impassable, and shipment of our Concentrates was almost stopped during those months. Labor was short at the Mine during Harvest time last fall, and while planting maize this spring. Eleven days were lost in December last by the burning out of the Armature and Collector in our main Dynamo, which shut down our Electric haulage in the Mine and cut off the supply of ore during that time.

Notwithstanding these set-backs work has been pushed, and our output of ore to Mill was 5,385 tons more than during the year preceding.

LABOR.

The average number of men employed during the year was as follows:

MINE	Company's men.....	416	
	Contractors and their men....	215	
			631
MILL	Men.....		61
GEN. LABOR	Men.....		169
	Total		861

We have done more work and are employing more men since September. At the present time we have:—

MINE	Company's men.....	465	
	Contractors and their men....	210	
			675
MILL	Men.....		78
GEN. LABOR	Men.....		196
	Total		949

MINE WORK.

The following gives what we call Advance made during the year i. e., Drifts, Cross Cuts, and Raises made in new ground:

Vein.		Drifts.	Raises.	Cross Cuts.	Timbering.
Buenaventura, Upper	700	259.0 ft.	104.0 ft.	86.0 ft.	13.0 ft.
	350	576.0 "	156.0 "	28.5 "	
	250	259.0 "	78.0 "		
	150	157.0 "	263.5 "	239.5 "	
Zero		256.5 "	8.0 "		
Lower	100	258.0 "	14.0 "		
	300	119.0 "		18.0 "	
	400		105.0 "		
	650		35.5 "		
North West, Upper	500			54.0 "	
	350 to 700				150.0 "
	250			27.0 "	
	51 to 700			73.5 "	
	150			8.0 "	
Zero				37.0 "	
165′ 5″ High Bottom					
Lower	400	19.5 "	20.5 "	7.5 "	
	650	25.0 "	17.0 "		
West Upper	500	394.5 "			
	350	70.0 "	157.0 "	53.5 "	150.5 "
		107.0 "	101.0 "		43.5 "
	150	296.0 "	163.0 "		
Lower	400	12.0 "			
Gaudalupe, Upper	900	100.0 "		108.0 "	
	700	509.25"			
	500	155.0 "			718.5 "
	350	337.0 "	22.0 "		45.75 "
	250				130.0 "
Zero		129.5 "			
66:0 Open Stope.					
Lower	400	346.25 "	199.0 "	10.5 "	
Colonia		128.0 "			
		4,513.5	1,443.5	751.0	1,251.25
					8,190.75

The above shows 1008 ft. less than the advance made in the previous year. It must not, however, be taken as evidence that less ore-bearing territory was worked, or that the prospecting was allowed to fall behind. It was not necessary to run so far through non-producing ground in our prospect work this year.

Upper 900 Level.

The Cross Cut met what we suppose to be the Gaudalupe Vein, and was carried 540 ft. further to join the North West or new West Veins. The length of this Drift, 1100 ft., makes it difficult to work without artificial ventilation, and work has been suspended. It is better to wait until connection can be made with the 700 Level below, through Raise 50, now going up and which lacks but 115 ft. to reach the Level of the 900.

Upper 700 Level.

In January last the Upper 700 Level, which had followed the Buenaventura Vein, cut the Gaudalupe. The latter has been followed both N. E. and S. W. In the latter the vein, while giving occasional good assays, was small. We have drifted upon it 235 ft. to Block 54, but have stopped at that point, and will prospect the vein ahead by Upraise from the 500 Gaudalupe and new West below.

The vein in Drift N. E. has been irregular while passing through the broken ground which we found in all Levels as the Gaudalupe, Buenaventura, and N. W. Veins approach one another. During the present month it has become stronger and is turning towards the East, taking the regular course of the Gaudalupe Vein shown in our Levels below.

On the Main 700 Buenaventura Vein Upraises are being made, following the vein in Blocks 50 to 51, to prospect the ground and to connect with the Upper 900. In the first, now 89 ft. high, the vein holds its strength and value. In Raise 51, now 46 ft. high the vein is narrower but continuous. A third Raise also on the vein and further to the East will be begun this month.

Connection between 700 and 350 Levels, Raise 50, is being enlarged and divided into two compartments. This is now completed to the 600 Level, and should reach the 700 by middle of December.

Upper 500 Level.

A most important part of our work has been to open the ore bodies upon the Buenaventura and new West Veins at this Level. Raise 57 was carried up early this year, and drifting begun East and West upon the vein. Progress was slow owing to lack of ventilation, and heavy ground which required secure timbers. Within the past month the East Heading has connected with drift run the latter part of 1893, from the old North West Vein in Block 55, and we have now free circulation of air through Raise 53 North West and 57 West Veins. The Heading West is 110 feet beyond Raise 57, and now has 20 to 24 inches of ore in breast. The whole drift for 290 ft. from Block 55 to West Heading in Block 58, shows a continuous vein of good ore varying from 12 to 28 inches in width.

The Level below carries the ore to its heading in Block 61. Again in the 250 the ore continues to the breast in Block 59. This ore streak appears to grow stronger as it grows upward, and we have therefore reason to expect a large body of ore above and to the West of our present work in these three levels.

In September, when the new Raise 50 Buenaventura reached the 500 Level, we started drifting both East and West upon the ore streak disclosed late last year by Cross Cut at that point. To the West 67 ft. have been run and the vein continues with varied width of 12 to 18 inches. To the East the ore opened, and is now over two feet in thickness. Taking the increase in strength of the ore at 500, and with the showing that we have in 600 and 700 Levels, directly above, we can look with increased confidence upon having this body of ore continuous from the 350 below to the top of the prospect Raise above 700, a distance of 435 ft., and we are still following it upwards.

Upper 350 Level.

We have the ground now opened and the vein continuous for nearly 1,200 ft. from the East side, Block 47 Gaudalupe, to Block 59 West. We have carried up the stopes upon this body from 100 to 140 ft. in Blocks 51 to 54, and the ore streak holds both in width and value. East of 51 stoping has just begun, and West of 54 the ground is still untouched. We have therefore this extent of ground before us ready to stope as needed.

In the coming month an Upraise will be commenced from breast of our 250 West, Block 58, and continued to the 500 to develop the ground between these Upper Levels and for ventilation. It will be run simultaneously from both 250 and 350 Levels.

Upper 250 Level.

Buenaventura Vein. The Drift going East has been in ore from East side of Block 51. The Heading has now passed Raise 49 and still carries the ore at Breast.

Upper 150 Level.

Our field of work in the Mine has been moving upward during past years, and to-day the greater portion is done above the upper 350 Level Our newer ore reserves lie still higher, and we must advance towards them more rapidly with the larger tonnage we are now taking out. The Rosario or Lower 650, which was our transporting Level for both Ore and Waste, is now too far away. The ore must still go there to reach the Sorting Plant, but the waste can be more readily taken out above. For this we are preparing the Peña Blanca Level. To tram economically, the quantity of waste to send out, the track must be on grade and the line as short as possible. To this end the track, from the mouth of the tunnel to end of Cross Cut, Block 45, was relaid, graded and straightened in June and July last. The old course followed the North West Vein from Block 45 to its junction with the new West Vein in Block 53. To give a direct and shorter line a drift was run through Blocks 46 and 47, to connect the end of Peña Blanca Cross Cut with the Buenaventura Level. The was completed a month ago, and we have now a straight track along the Buenaventura Vein to West end of Block 51.

Another drift is now being run in Block 52, to connect the Buenaventura West Heading with the Guadalupe and new West Vein. But 40 ft. are still to be driven, after which we shall have a graded and comparatively straight track from the mouth of the Peña Blanca Tunnel to the breast of 150 West Vein, now in Block 63. To reduce cost of taking out ore we shall use mules for hauling the cars when this connection is finished. We need, however, a quicker motive power to increase the capacity of this service and should have an electric locomotive.

Zero and Lower 100.

In Zero Buenaventura we are now working a body of ore in Blocks 50 and 51. In Gaudalupe stoping is going on in Blocks 52 and 53. On Lower 100 work is now confined to the Stope in Block 47 Buenaventura.

Lower 200.

No work is now going on in this Level. The Tunnel is kept thoroughly timbered, as is also the 300. Canals and tracks are carefully kept in good condition, and both tunnels are used for entrance to the Lower Levels and above as far as the Zero. No traming is done on these Levels except to bring in timbers.

Lower 400.

The Gaudalupe Vein cut in this Level, Block 55, has been followed for over 400 ft. It has disclosed good pockets of heavy sulphide ore running 30 to 60 ozs., and occasional bunches of higher grade, but the ore streak has not yet proved continuous, although the vein is strong and wide. The vein has now swung to the East, following the course of the Guadalupe as shown above. As a prospect it is encouraging. Stoping is being done in Block 53 and sulphide ore taken out, not high in grade but which concentrates readily.

Rosario or Lower 650 Tunnel.

The heavy ground from mouth to breast of this tunnel is carefully watched and timbers replaced whenever they show signs of decay. Heavier posts are also put in where the old ones appear weak, and the tunnel is gradually being made more secure. The 25 lb. rails laid a year ago are giving excellent service, and the ore trains have run without serious accident or delay during the entire year.

In this our lowest working Level the vein is strong in the breast and should be followed. The large quantity of work in the Upper Mine has not permitted this to be done up to the present, but it must begin in the coming months. For this we need additional Compressor power. Our Air Drills in the past have never had sufficient power to work to their capacity.

Ore Chutes.

During the past year we have completed two main Ore Chutes. No. 49 leads from the Upper 350 Buenaventura directly to the 150, there by short transfer material is taken across to the N. W. Vein. Thence the Chute leads directly down to the Lower 650. This Chute is now being carried up from the 350 to the Upper 500.

Chute 51 begins at the Upper 500 and passes without change down to the Lower Level.

Both are capacious and permanent Chutes, cut through solid rock. No. 49 is used at present for waste, and No. 51 for ore.

Chute No. 52, in use a year ago, was run through soft ground above the Lower 300, which caved badly and required constant timbering. It is consequently no longer used as a through Chute. Below the 300 it is solid and can relieve the 49 or 51 if necessary.

Colonia.

On the Crucero side of the mountain the old drifts in the Colonia have been cleaned and repaired. Tracks have been laid in the Compressor or Main Level and in the Level No. 2 146 ft. below. Our work during the past months has been mainly cleaning up the old stopes and taking out ore left by those who worked them in years past. At the same time driving ahead the faces and chimneys in which were found pay ore. Part of this work bears evidence of being many years old, but the greater portion was done by those from whom you purchased the property.

We began this Colonia work in March. Up to October 1st we have taken out from these old workings 850.31 tons of ore containing 75,367.51 ozs. Silver, and 562.40 ozs. Gold. This ore is washed at the Patio in front of the Compressor Level, then hauled to Rosario and delivered at the Tramway.

At present we are driving the heading on No. 2 Level. It will be first carried 200 ft. to take it under the Block of ground in which we found good ore going down from the Level above. Should the vein continue it will be carried still further as a Prospecting Drift.

ORE RESERVES: ESTIMATE 1905.

		Level.	Blocks.	Tons of Ore in sight.	Ore proved on two sides.
Gaudalupe and West Veins.					
	Lower	400	53	315	
	"	400	53	650	
	"	400	51		1,600
	"	300	51	595	
	Zero		52	455	
	Upper	350	57-60	2,560	
	"	350	54-57	1,380	
	"	350	54	100	
	"	350	47-51		4,375
	"	350	51-53		2,175
Upper 350	"	500	60		1,060
Upper 500	"	700	51-61		8,690
North West Vein	Lower	400	54	240	
Buenaventura Vein	"	300	50-51	450	
	"	100	47	350	
	Zero		49-51	1,000	
	"		51	75	
Upper 150	Upper	250	49-51	980	
Upper 250	"	350	49-51	1,350	
Upper 350	"	700	50-51	12,000	
	"	700	51	1,430	
	"	700	50		300
				23,930	18,200

The above quantity of ore which our Development shows us to be ahead is calculated by our Mine Superintendent, Mr. A. H. Buck, assisted by the Mine Engineer, Mr. H. G. Palsgrove. The Stope Maps at end of this Report, marked "Annex A & B," show clearly the location of the several Ore Bodies. They are divided as follows:—

ORE IN SIGHT. That proved upon three sides of the Ore Body.

ORE SHOWN BY WORK DONE upon TWO SIDES of the ORE BODY.

In further explanation of the way this tonnage is calculated showing the conservative manner in which the estimate has been made, our Mr. Buck says:—

"The Block of 'Ore' between U 350 and U 500, in Block 60, might safely be classed as 'Ore in Sight,' though not conforming to the generally accepted condition of 'Ore in Sight.' The same may be said of that above the U 350 in Blocks 58-60, for the reason that the ore improved continually in Raise

57 to the U 500, and now, in the breast of the drift (Block 59), is 5 ft. wide. It is safe to assume that the Ore will continue at least as far as the lines are drawn, and probably much further.

"The Ore in the N. E. Heading, U 700 Guadalupe, is improving in width and value; that in the top of Raise 50 Buenaventura, U 700, continues to hold its width of 18 to 24 inches, and the Ore in Raise 51, Buenaventura, U 700, is improving as we go up on it. As these Raises and Headings are being driven as fast as possible I see no reason why the available Ore Supply should not be kept at least as far ahead of the consumption as it now is.

"In making up the above the following basis of calculation was used:—The specific gravity of quartz is 2.6; of Pyrite 5.2 and of Galena 7.8. Quartz in place, therefore, occupies 12 cubic feet; Pyrite 6 cubic feet; and Galena 4 cubic feet to the ton. As the Ore on the Lower 400 in Block 53 carries a large amount of Galena and Pyrite, it was assumed to occupy 9 cubic feet to the ton. In all other parts of the Mine the Ore was figured at 11 and 12 cubic feet. The widths of the veins also were carefully considered and taken as varying from 6 to 18 inches, the greater portion being 9 and 12 in."

PROSPECT RESERVES.

In addition to the above tonnage we have PROSPECT RESERVES i. e., opened upon one side of the body, or that which we have reason to believe should continue, from knowledge of the vein gained by past work, and from its present strength in stopes and Headings.

The estimate of these reserves made in my report a year ago has been more than borne out by their product. We have, therefore, a right to expect that under the same conditions we shall open bodies fully as large in our prospect work through the year to come.

BUENAVENTURE VEIN.

In this class I include the ground above the Upper 700′ Level, extending towards the 900′ Level Blocks 49 to 52	4,600 tons
Ore on the 250′ Level, E. of Raise 49, for 240′ and thence up to the 700′ Level	9,250 "
Forward	13,850 tons

Forward ..... 13,850 tons

WEST VEIN.

The Block of ground between the 250 and 350 Levels from Raise 57 W. to Raise 60..... 1,400 "
The territory W. of Raise 60 from 250 Level up to the 500′ Level..... 3,917 "

GUADALUPE VEIN.

Between New Zero and 150′ Levels, Block 53.... 1,100 "
700′ Level; ground open above the Drift which has followed the Guadalupe Vein for 300 ft., with present heading in Ore, Blocks 51 to 48..... 2,500 "

Total ..... 22,767 tons

SUMMARY.

ORE IN SIGHT, proved on three sides..... 23,930 tons
ORE PROVED ON TWO SIDES..... 18,200 tons
PROSPECT ORE ..... 22,767 tons

Total ..... 64,897 tons

None of the Prospect Reserves are shown upon the Stope Maps attached to this Report. They include only the bodies which are proved upon 3 or 2 sides. These are now ready to connect and open for stoping, or are being worked. They can therefore be accurately located upon the Stope Maps. Of the Prospect Reserves we can only base our estimate upon the face exposed and allow a reasonable distance for continuance. I have therefore not attempted to place them upon the Maps.

MINING COSTS.

Taking as unit the tons of dry ores delivered to the Mill during the past year, the cost of Mining and delivering Ore to the Sorting Plant at mouth of Rosario Tunnel is as follows:

Assaying and Sampling.....Pesos	.21
Ore Breaking	12.54
Development	4.26
Underground Repairs	1.49
Timbering	1.27
Prospecting and Dead Work.....	4.73
Tramming	.81
Electric Haulage	.58
Surface Prospecting	.01
Power	.13
Unclassified Labor	.11
	26.14
Proportion of General & Incidental Expenses	7.19
	33.33 pesos
or	$13.33 gold

For details of General and Incidental Expenses see Cost Sheet, page 26.

ROSARIO SORTING PLANT.

In December last a new ore cleaning and Sorting Plant was erected at the Rosario Patio. The Ore is dumped from the Tram Cars upon a Grizzly with 1¾" openings. The larger pieces fall upon the Sorting Floor where they are washed, picked, put through the Crusher, and discharged into the Bin below. The finer Ore passes into the Storage Bin (capable of holding 200 tons), then to the Trommels where it is sized, washed, and each size discharged upon its own belt. There it is picked and the belts in turn convey the lumps to the loading Bins. The Sand and Fines after washing go to the Elevator, which raises and discharges them into the loading Bins, from whence the Ore is delivered into the Tramway Buckets.

The Slimes are run into and settled in Tanks below the Loading Bins. From there canals carry the overflow to other Settling Tanks across the Gulch.

The capacity of the Plant is 83 tons cleaned Ore or 76 tons milled Ore dry weight each ten working hours.

The Mine Water which flows from the 200 Level above is brought down in a 3" Pipe to the 18" Pelton Water Motor, which furnishes the Power for the Sorting Plant. Only a

portion of the water is now used and the power can be increased if necessary.

The cost of washing, sorting and delivering one ton of Ore, dry weight, to the Tramway Buckets for the year past was.....Pesos 1.22
The proportion of General and Incidental Expenses..... .23

Total pesos 1.45
or 58 cents Gold per ton.

SURFACE AND GENERAL IMPROVEMENTS.

Upper 700 Level.

New 15-lb. rails laid from breast of Tunnel to edge of Dump, distance 2,450 ft.

Four double houses erected on Patio below Dump.

New road built from Patio to Main Road to San Juan, distance 1-3 mile.

Peña Blanca.

Wagon Road 1½ miles in length built on grade and macadamized. By this road timbers can be brought in from the mountain by wagons instead of being hauled by oxen or men as formerly.

New Powder Magazine built of stone to hold 1,000 boxes of Dynamite.

Buildings—Frame—Storehouse, Blacksmith Shop, Stable for Wagon and Mine Mules, Shed on dump for cutting and framing Mine Timbers.

Colonia.

Sheds for Ore Cleaning at Mine and No. 2 Levels.
Iron Track in Main and No. 2 Levels 650.

Lower 200.

Frame building for General and Superintendent's offices.

Water brought in 2" Pipe from above Peña Blanca Patio for Household and Fire Service. Length of Pipe 4,200 feet. Pressure 100 lbs. to the square inch at 200 ft. Level.

Superintendent's house remodelled and enlarged.

Durasno Plantel.

Four double houses for Miners and families.

Rosario.

Frame Building of four rooms, used by Don Alberto Smith as Store to supply employes living at Mine and Rosario.

Gravity Railway.

Rebuilt and laid with 15 lb. iron rails and switches.
Two Iron Water Tank Cars for same.

Higuerillas Patio.

Building for Watchman and Family.
Building for Storing Zacate, Pack Saddles, &c.

Escobales.

Road from above Mill to the Pastures at Escobales, ½ mile, for use of mules hauling cord wood.

San Juancito.

Frame Structure containing 7 rooms for Mill employees. two double houses for Mill employes and families.

Three Frame Buildings for Office employes and families.

One Frame Building for Commandante and family.

One Frame Building, with Cement Vault below, to hold 2,000 sacks salt, with discharge gate into Mill at Pan Floor Level.

New Drying Table for Concentrates.

Enclosure on Plantel fenced and roofed for storing spare parts for Mill.

Barbed Wire Fence on both sides of Mill next the town. All persons must now enter the Mill by the Main Road in front. This Fence will be extended around the rear of the Mill and watchman placed at gate. This will keep out all but employes and help to stop the pilfering of wood, amalgam and tools, which has been going on during the past years.

New Bridge over gulch and stream at Carboneras.

The Main Road to Tegucigalpa improved and the worst places paved or dressed with macadam.

The grass planted last year in the Company's pasture at Escobales has grown well and now furnishes a considerable part of the grass needed for the Company's animals.

The above enumerated, together with many other improvements, put the Company's property in better condition and render it more valuable than at the beginning of the present year.

Tramway.

The tonnage carried has been greater than in any previous year and the Tramway has run without serious delay or accident. Several new Towers have been erected during the year to replace those weak or decayed. The Cable put on early in February last has not given good service and must be changed on November 1st after nine months' use.

The height of several Towers has been changed in the endeavor to distribute the strain more equally and thereby increasing the life of the Tramway Rope.

The direct cost of delivering Ore over the Tramway from Rosario Patio to Mill Bins during the year was 82 cents silver per ton.

The proportion of General and Incidental Expenses of same was 23 cents silver, making a total of 105 cents per ton, silver, or 42 cents, gold, per ton, dry weight.

The direct cost of delivering ore over the Tramway from Rosario Patio to Mill Bins during the year closing September 30th, 1904, was per ton.....	Pesos 0.82
Proportion of General and Incidental Expenses	0.23
Total per ton.....	Pesos 1.05
or gold per ton.....	$0.42

Mill.

Both Amalgamating and Concentrating Departments have been changed and improved, and the Mill is to-day putting through larger tonnage with economy in handling and better saving. The coarse ore is now broken at Rosario Sorting Plant in one Crusher, and the use of three Crushers at Mill is dispensed with. All ore is dumped into Hoppers

and carefully weighed before discharging into the Mill Bins. Thus we know for the first time in the history of the Mine exactly how much ore is treated, and can ascertain the real extraction.

The Pans and Settler which were formerly apart and called "Little Mill," have been moved up and into line with the other Pans and Settlers, where their work is under the eye of the Superintendent. The Mill floor under Pans and Settlers, Quicksilver Safes, and wherever amalgamating is done, has been covered with cement and slopes down to a canal in the centre, which in turn leads to a sump and Quicksilver trap. By this we avoid loss by leakage from Pans or Settlers, and from Mercury spilt when charging Pans or dipping Amalgam. This formerly went into the dirt and gravel which composed the Mill floor.

The Bucket Elevator to raise overflow from Concentrating Tables to level of Pans has been removed. It caused much delay. The Table Sand is now pumped up by Centrifugal Pumps. One Pump does the work, but a second is kept as reserve for time of accident or during repairs.

Five Wilfley Concentrating Tables have been added, making ten in all. The Battery Pulp to feed them passes first through two Hydraulic Classifiers. Overflow from these goes to Spitzkasten, and underflow is brought to six Wilfley Tables. The overflow of Slimes goes to a Wilfley Slimes Table and two Canvas Tables recently erected to test what saving can be made by that form of Table.

The product from the Settling Tanks in Mill is taken to the Tailings Plant, there settled and the product sent back and passed over two Wilfley Tables.

The Wilfley Slimes Table appears to be doing good work but it has not been tested long enough to give definite results. If satisfactory several will be required to handle our Slimes product. These Tables are expensive and the one sent is weak in construction. If the Canvas Plant can be made to do the work as well it will be much cheaper. Before, however, attempting further treatment of our Slimes by Concentration we should know what can be done by Cyaniding. The many changes and repairs at Mill have so far prevented our putting up the Cyanide Testing Plant sent down a few months ago. The ground is now being prepared and tests will be begun as soon as the Tanks, etc., can be put together.

To illustrate the present operation of Mill, Mr. Watson, Mill Superintendent, has prepared the attached drawing, marked Annex C, which shows more clearly than can any

description the course of Pulp from Batteries to Tables, and Pans,, until it reaches the outside Riffle Tables and final Slimes Tank. The Drawing explains the distribution of coarse and fine product to the various Tables, and flow from the Mill Settlers to Tailings Plant and Settling Boxes, whence it is sent back to the Sand and Slime Tables.

The Mill to-day has a capacity of 85 tons. We can, however, do little more. We cannot make an old Mill into a new one. It was built originally for Amalgamation only, and when Concentration was adopted the Tables had to be placed below the Pans and Settlers. Our Battery Pulp must go down first to the Tables, and the overflow raised by Pump back to the Pans. Thus we lose all benefit which we should receive from our Mill location. We are hampered by lack of room, shut in between the hillside and river; and cannot avail ourselves of gravity to move our tonnage.

From October 1st, 1903, to September 30th, 1904, there were put through the Mill 21,005 tons ore, dry weight:—

Average Battery Assay, per ton..Silver	59.54 Ozs.	Gold.... 0.28 Ozs.
Product:		
257 Bars Bullion containing ...Silver	389,390.73 Ozs.	Gold 1,101.31 Ozs.
686.274 tons Concentrates containing .....Silver	666,212.41 Ozs.	Gold 3,964.27 Ozs.
Total number of Ounces ....Silver	1,055,603.14 Ozs.	Gold 5,065.58 Ozs.
Extraction .....Silver	84.35%	Gold 86.70%

Mill Costs per ton of Ore Crushed, dry weight:—

Assaying and Sampling.....Pesos	.44
Power	.24
Crushing	2.40
Concentrating	2.19
Amalgamating	6.76
Pesos	12.03
Proportion of General and Incidental Expenses	3.31
Total .....Pesos	15.34
or in gold value	$ 6.14

In all Statements giving value of product I have figured Silver at 50c. per ounce. When Honduras currency is reduced into Gold values 150% is used as exchange rate.

PRODUCTION.

Months.	Tons Crushed.	No. Bars.	Bar Value.	Tons Concent.	Conc. Value	Total Value.
1903 October	1,360	14	$ 12,779.31	29.375	$20,857.14	$33,636.45
1903 November ..	1,623	21	17,836.62	20.125	23,846.76	41,683.38
1903 December. ..	926	14	9,640.38	20.125	15,174.57	24,814.95
1904 January	1,840	23	18,052.92	40.302	27,954.70	46,007.62
1904 February ...	1,789	24	20,216.24	51.680	34,310.60	54,526.84
1904 March	1,966	25	19,896.07	62.430	38,709.28	58,605.35
1904 April	1,599	23	16,163.80	54.180	31,442.02	47,605.82
1904 May	1,792	22	19,771.72	71.700	40,688.84	60,460.56
1904 June	1,927	24	20,973.66	68.250	35,863.58	56,847.24
1904 July	2,160	20	17,635.43	89.562	47,538.39	65,173.82
1904 August	1,976	21	20,936.75	89.687	48,607.82	69,544.57
1904 September ..	2,047	26	21,602.80	88.858	50,049.84	71,652.64
Totals	21,005	257	$215,505.70	686.274	$415,043.54	$630,559.24
Average per mo.	1,750.40	21.4	17,958.81	57.190	34,586.96	52,545.77

COST PER TON CRUSHED.

Mining:

As per statement on page 20..... Pesos 26.14

Cleaning:

Ore Sorting, incl. Repairs of Plant..... " 1.22

Tramway:

Incl. Cost of one new Cable..... " 0.82

Milling:

As per statement on page 25..... " 12.03

Expenses:

General and Incidental.....		
Agency Expense		
General Expense	7.01	
Pensions, Salaries, &c.....		
Management		
Building and Repairs.....	1.27	
Property Improvement	1.09	
Electric Light	0.19	
Telephone (incl. Construction).....	0.15	
Ice Plant	0.12	
Police, Soldiers and Watchmen.....	0.57	
Roads, Construct. and Repairs.....	0.66	11.06

Freight:

On Product per ton crushed..... 1.88

21,005 tons crushed with a Total Expense of Pesos $1,119,307.97; or per ton F. O. B. Amapala..... Pesos 53.15

Equal to gold..... $21.26

The following Statement shows comparative cost of Bullion and Concentrates. It includes all costs of production, freight and handling from the time the Ore is delivered to Mill until it reaches the Smelter or Refinery in the United States. In making this comparison, I have used for Bullion the average cost per Bar, during the year, for Ocean Freight and Refinery Charges i. e. $24.14. For Concentrates, I have used Ocean Freight and Smelter treatment charge, amounting to $23.00 per ton, also Smelter's deduction of 5% upon Silver.

"Charge for Sacks" allows 6 trips for each Inner and Outer Sack, which has been the average life of Sacks during the past two years.

With this large difference in favor of Concentrates you will be pleased to learn that with our additional Sand and Slimes Tables, and closer work, the proportion of values taken out in Concentrates has steadily increased during the past months.

Accounts:	Bullion:	Concentrates:
Crushing .....Pesos	3,519.34	Pesos 7,038.70
Concentrating	.....	9,655.98
Amalgamating	29,788.56	.....
Power	2,468.76	4,937.52
Assaying	2,124.19	2,124.19
Chemicals	133,027.26	.....
Crushing Supplies ..	1,332.80	2,665.60
General Supplies ..	27,046.68	15,117.24
Train & Guards to Coast	2,724.00	.....
Freight to Coast Conc.	.....	37,124.34
Total Expense on Products	202,031.59	78,663.57
Exchange 150% U.S.C.	$ 80,812.64	$31,465.43
Ocean Freight & Treatment.		
On 257 bars product at $24.14	6,203.98	
On (686,274) tons of concent. a $23. av.		15,784.30
Smelter Deduction:		
5% of oz. 663,847.39		
33,192.26 oz. ag. at 50c		16,596.13
Cost of sacks.....		527.06
Total .....$	87,016.62	Total .....$ 64,372.92
Value produced during year.....$	215,505.70	$415,043.54
Cost of production, 40.38% of value		15.50%

Power.

We have at Mill to-day 225 Horse Power with Flumes running full. Minimum records for Water during past years give but 114 H. P. in the dry season. This may be somewhat increased by the Auxiliary Flume built a year ago, but must fall far below our requirements. We cannot figure upon more than 150 H. P. during the dryest months, which means running but one-half of our Mill. The need for more power is therefore apparent.

Our Mr. Hardy, in his able Report, places before you results of examinations made by him and our Mr. H. G. Palsgrove, of various localities from which it was thought greater power might be obtained. It gives also the records made by Mr. H. F. Lefevre of maximum and minimum Water flow during years past. From all of these only the canal from Higuerillas Dam to a point above the new Cemetery promises to give the greater power required. Fortunately this involves the smallest outlay. Our present Dam can be used. We shall have to construct a new Flume of 7,634 feet, and Stand Pipe of 2,585 feet to secure 175 H. P. with minimum flow of water. From the present Power Plant at Higuerillas we only obtain 65 H. P. We shall therefore gain 110 additional H. P. The Plant will be located between Mine and Mill at a point convenient for Electric transmission to either. With this Electric Power Plant we shall not alone increase our force, but can economize its use by moving the Compressors closer to their work at Mine, and save the greater part of the waste and friction which now comes from carrying Compressed Air from 1½ to 2 miles to the various Headings in the Mine.

A good part of the expenditure for Pipe and Flume must be made within another year even if the new Plan be not adopted. The present Flume and Pipe to Compressor are weak through age and wear, and must be soon replaced. I trust that the Board of Directors will authorize this construction. It should be taken in hand at once to avail ourselves of the Dry Season now coming.

CONCLUSION.

Throughout the twelve months past peace has prevailed throughout Honduras. Nothing in the Political situation has retarded or interferred with our work.

The Wagon Road from Tegucigalpa to San Lorenzo is being actively pushed forward by the Government and is now

completed to beyond San Antonio de Flores. Two leagues more to reach Pespire; five leagues between that place and San Lorenzo; and the work of building the bridge over Rio Chiquito, only remain to complete the enterprise. If work is kept up at the present rate all will be finished within 8 months. We can then dispense with the mule as a means of transport below Tegucigalpa and freight our Concentrates and Supplies from the Coast by Traction Engine or other mechanical haulage.

The Town of San Juancito is gradually being made better. The boulders which obstructed the Main Street and made it difficult for mules to pass have been removed, the road graded and paved.

The Schools are well attended and under the care of competent teachers interested in their work.

The health of the people has been good. They have suffered from no epidemic disease. We need a Hospital in which men injured or critically ill can receive better attendance than in their houses, which are usually overcrowded and unfit for those sick. A Frame Building 40'x14', with six cots, will answer the purpose. It will be well ventilated and with cement floor, which can be thoroughly washed and the Building kept in sanitary condition. Members of the family can there care for the injured. It will not be necessary to provide nurses. The patients will be removed when out of danger. The cost of this will be small. I trust you will authorize its erection.

With pleasure I call your attention to the interest which has been evinced by the entire Staff at Mine and Mill in their work and the efforts made to advance it.

The Mining knowledge and experience of our Mr. Hardy, and the energetic manner in which he has taken hold of our operating work and its difficulties has proved of the greatest service.

The Mine under Superintendence of Mr. A. H. Buck, assisted by Mr. H. G. Palsgrove, Engineer, shows great improvement as the result of the year's work.

The night work in Mine is closely watched by Mr. J. T. Sullivan, and as result we have cleaner Mining and better tonnage since he has taken charge of the Night Shift.

The changes and betterment of the Mill are largely due to the intelligent ideas and work of Mr. H. C. Watson, Superintendent, and Mr. Russel B. Paul, Assist. Superintendent.

A number of serious wounds and complicated cases have been treated by our Dr. Beatty with skill and success.

To those in the Laboratory, Mechanical and Accounting Departments like credit is due.

The above shows the General Condition of the Rosario Mine to be better than at time of making last Annual Report. The Ore Reserves are more carefully estimated, the ground containing them more fully Blocked out or developed, and the facilities for taking out ore are greater.

All this warrants you in looking forward to a profitable year's work.

Yours truly,

J. H. WEDDLE,

Manager.

SAN JUANCITO, Honduras, C. A., October 31st, 1904.

Mr. J. H. Weddle,

Manager New York & Honduras Rosario Mining Co.

San Juancito, Honduras.

Dear Sir:—

In compliance with your request for a resumé of the different propositions that have been submitted as a means of increasing the present supply of Water Power I have the honor to report as follows:

I have carefully examined the report of Mr. H. F. Lefevre, as also report of Mr. H. G. Palsgrove of his examination of the Rio Grande and also all previous reports made by myself.

I visited the power site described in Mr. Palgrove's report a few days after his examination was made. At that time the river was carrying by approximate measurement 30,000 cubic feet per minute. I have no information as to the quantity of water during the dry season. The "boulder strewn bottoms" are evidently at times covered to a depth of 3 or more feet during heavy rains. The bank on one side is low and sandy, the other bank being high but composed of sand and pebbles, somewhat cemented, and same would offer little resistance to erosion.

The canal and power plant would have to be protected by strong masonry work built up from the bed rock. The place does not offer natural advantages and the installation of

a plant that would ensure safety from sudden storms and heavy flows of water would be an extremely costly undertaking and possibly not a success.

I have examined "El Tigre" and "Jutiapa" creeks and found same to carry 40 and 65 miners inches respectively. From this I judge that those creeks during the dry season would not furnish sufficient power to warrant the long canal, pipe line, and power transmission that would be required.

I have measured the "Crucero" creek several times and found same to carry from 30 to 40 miners inches during the rainy season. This quantity of water under existing conditions would not furnish sufficient power to warrant the construction of a plant.

I am convinced that we must look to the "Escobales" and "San Juan" creeks for power, and to that portion of those creeks between the location of the Mill and their sources. This matter is explained in my reports of May 3rd and 17th.

Of the six propositions made by Mr. H. F. Lefevre in his report of Oct. 1st, 1900, No. 1 is the most advantageous as the most power and reasonable conditions are offered. This proposition is compared with that of my report of April 26th, 1904, as follows:—

Proposition No. 1, by Mr. M. F. Lefevre.

Minimum Flow	160	Miner's Inches.
Head	765	Feet.
Length of Pipe.....	2,400	"
Canals	11,000	"
Total Minimum Horse Power		290

Report of April 20th, 1904.

Minimum Flow	80	Miner's Inches.
Head	914	Feet.
Length of Pipe.....	2,585	"
Canal	7,634	"
Horse Power.....	175	
Horse Power Independent Plant at Mill,	114	
Total Minimum Horse Power		289

In the above only conditions and results of the dry season are used.

It will be noted that the latter proposition gives practically the same result, with 3,366 ft. less Canal to construct, 185 ft. more Pipe, and 2,362 ft. more of Flume to maintain. The aggregate length of the Flume now in use being 5,728 ft., makes a total of 13,362ft. against 11,000 ft. in the case of Proposition No. 1, by Mr. H. F Lefevre. There would be no interruption of the work, the Plant being independent and in addition to the present plant. The location would be central for the transmission of power to mine and mill, and would not be more expensive to run, as an extra day and night man would be necessary in either case. To install No. 1 means the throwing away of the entire Power Plant now in use.

I have purposely omitted mention of the small Power Plant at Higuerillas; as in either case same would be absorbed by the new. The Conduit about a mile in length is in bad condition, and in view of the extensive repairs that it would soon require there is litle loss in discontinuing the use of this plant.

It has been my endeavor to place complete information before you in a manner that will enable all who are interested to form an opinion independent of my own, which is: that it would be best to install the plant proposed in my report of April 26th, 1904.

Trusting that in this I have succeeded, I am

Yours Respectfully,

E. A. HARDY.

NEW YORK, December 1st, 1904.

To the President and Board of Directors:—

Gentlemen:—

With great pleasure I lay before you a statement of your financial standing at the closing of this fiscal year. Last year, when I presented a similar statement, I did not do so with the feeling of satisfaction that I now have.

In the figures presented today, you will note a material change for the better in every way. Last year our surplus

was $108,395, having paid but one dividend, this year we have paid seven dividends amounting to $105,000 and our surplus is $180,000.

We have produced during the year 1,172,377 oz. of silver, 5,202 oz. gold, of a total value of $721,374.87, as against $436,818.29 during 1903. Our entire expenses in Honduras were $396,842.72; our gross expenditures were $543,294.16, leaving a net profit in our favor of $217,289.78.

As will be noted, our expenses were higher than last year, but the great amount of new work done, betterments made, and increased machinery, as also the large stock of supplies on hand at the Mine, have well justified the outlay. Our reserve stock of all important supplies, extra and spare parts of machinery, etc., places us beyond any danger of running short, no matter what cause might arise to impede transportation; this expenditure will show for itself in a corresponding decrease for the coming year.

The changes in our milling work have shown a material improvement. We are constantly reducing our bullion and increasing the concentration. The Manager's Report (Page 27) shows the comparative expense of both processes. It will be noted that it costs us about 40% to produce bullion, as against 15% for Concentrates. If the experiments now going on prove successful, we hope, in the near future, to do away with bullion production entirely, producing only concentrates.

Annex AA shows the amount of bullion produced since our organization, amounting to $10,317,878.73, and the dividends paid, amounting to $1,890,000.

As to-day we have a valuably developed property, and an inventory as per balance sheet showing $2,530,104.45 value, we think our showing a satisfactory one.

Herewith I beg to submit the audit of our books, made by the Security Audit Company of New York.

Respectfully submitted,

S. HEIDELSHEIMER,

Treasurer.

The Security Audit Company of New York,
Public Accountants and Auditors.

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128 Broadway.

New York, December 10, 1904.

To the President and Board of Directors of the
New York & Honduras Rosario Mining

New York.

Gentlemen:—

In compliance with your instructions we have audited the books of accounts of your corporation at your office in this city, for the fiscal year from December 1st, 1903, to November 30th, 1904, and hereby certify that the same are correct and in accordance with the Balance Sheet and Profit and Loss Account annexed hereto and forming part of this report.

We call attention, however, to the fact that the ledger account for the expenses at the mines, which we have audited, did not record the expenses for the above fiscal year, but, in conformity with the method previously applied to this account, for the period from October 1st, 1903, to September 30, 1904; also that the inventories of assets in Honduras were already taken October 1st, 1904. In order to show the exact financial condition of your Corporation at the end of the fiscal year, the said expenses up to November 30, 1904, should have been included and inventories taken that day, but, owing to the slow communication with the mines, this measure would considerably delay the closing of the books here.

Respectfully submitted,

THE SECURITY AUDIT CO., of N. Y.

(Signed) Geo. Weaver.

Secretary.

CONDENSED BALANCE SHEET AS OF NOVEMBER 30, 1904.

ASSETS:		
Mines, Real Estate other than Buildings, Concessions, etc	$1,698,397.00	
Tramway and Gravity Road	27,300.00	
Buildings	34,350.00	
Machine Shop	27,142.00	
Air Drill Plant	37,800.00	
Mill Machinery	163,286.00	
Surveyor's Implements	1,890.00	
Office Furniture	1,043.00	
Inventory at Agencies	3,784.50	
Live Stock	5,860.00	
Bullion and Concentrates	218,170.00	
Ore, Slimes, etc.	20,139.00	
Supplies	147,742.24	
Cash	7,324.33	
New York City Bonds, 1911, par value $50,000	50,875.00	
Bills and Accounts Receivable	9,340.00	
Superintendent's Acct. in Honduras.	75,661.38	
LIABILITIES:		
Bills Payable		34,002.46
Loans Payable		30,000.00
Capital Stock		1,500,000.00
Surplus		966,101.99
	$2,530,104.45	$2,530,104.45

CONDENSED PROFIT AND LOSS ACCOUNT FOR YEAR ENDED NOVEMBER 30, 1904.

To Bullion and Contrates on hand or in transit December 1, 1903	$97,476.00	
To Ore, etc., on hand October 1, 1903	19,594.00	
By Bullion and Concentrates sold during the year		$600,680.87
By Bullion and Contrates on hand or in transit November 30, 1904		218,170.00
By Ore, etc., on hand October 1, 1904		20,139.00
To Operating Expenses (see remarks in report)	485,238.94	
To Balance, Gross Profit	236,680.93	
	$838,989.87	$838,989.87
By Balance carried down		$236,680.93
" Interest on Bonds $2,250.00		
" Less Interest paid on Loans and Discounts 2,134.73		115.27
To Office Rent	$1,744.50	
" Salaries	9,538.84	
" Directors' Meetings	4,424.00	
" Stationery	229.88	
" Postage	278.07	
" Cables and Telegrams	358.41	
" Taxes	187.82	
" General Expenses	2,744.90	
	$19,506.42	
To Balance, being Net Profit	217,289.78	
	$236,796.20	$236,796.20

NEW YORK CITY, N. Y., December 1 1904.

To the President and Board of Directors:—

Gentlemen:—

In the endeavor to render this year's report more complete, I desire to call attention to the following matters not touched upon in the preceding reports:

INVENTORY.

A comparison of our Inventory values between 1903 and 1904 proves of much interest, showing, as it does, that a great part of our expenses were applied to the betterment of our properties, the most important being:

October 1, 1903, Inventory value of the Mill Department was	$140,220
October 1, 1904, Inventory Value of the Mill Department is	163,286
Showing an increased value of	$ 23.066
October 1, 1903, Inventory value of Buildings was	$ 18.200
October 1, 1904, Inventory value of Buildings is	34,350
Showing an increased value of	$ 16,150
October 1, 1903, Inventory value of Surface Improvements was	$ 20,400
October 1, 1904, Inventory value of Surface Improvements is	25,037
Showing an increased value of	$ 4,637

The total increase of Inventory values of our property in Honduras during the year, excepting supplies, was $55,470. The articles in the various departments and storehouse have been carefully enumerated and figured at cost. The value of the newer buildings are valued at cost less a percentage for depreciation; the older buildings are valued at halt cost.

A large amount was spent in the Mill during the year, and it is to-day in better condition than in previous years and capable of handling larger quantities of ore. The amount

spent thereon is not added to value of Mill, against which no deduction was made for depreciation. The added value over last year is represented by new Pan Tanks, Concentrators, etc., which provide for the increased tonnage.

The depreciation of value of supplies at Mine, which includes appurtenances, arises from deducting value of the wooden tracks and ladders in those parts of the Mine not now in use.

The new item of Sorting Plant at Rosario covers cost of its construction and machinery in same.

At the special meeting of Stockholders May 10th, 1904, called for the purpose, a new set of By-Laws was adopted. These were framed with the aid of Counsel, and we believe fully cover everything to properly guide our proceedings.

Under Article VI, both the Treasurer and Secretary are obliged to be under bond, which was done.

By resolution of the Board of Directors, the Executive Committee, as provided for under Article VII, meets every Thursday, to review all business transacted during the week preceding such meeting, and to provide for the business for the ensuing week.

Article IX, relating to stock certificates, obliges the registry, by the American Exchange National Bank, the Registrar designated for this purpose by the Board of Directors, of all certificates issued since May 10th. This feature giving added security to all certificates.

All purchases of supplies are now made on a competitive basis, from such firms giving best prices.

Books and statistics are on file, giving in detail all information relating to our work and progress.

Respectfully submitted,

ERNEST SCHERNIKOW,

Secretary.

BALANCE SHEET.

LIABILITIES.

To Capital Stock	$1,500,000.00
" Acceptances and Notes Payable	34,002.46
" New York Produce Exchange Bank	30,000.00
" Surplus	966,101.99
	$2,530,104.45

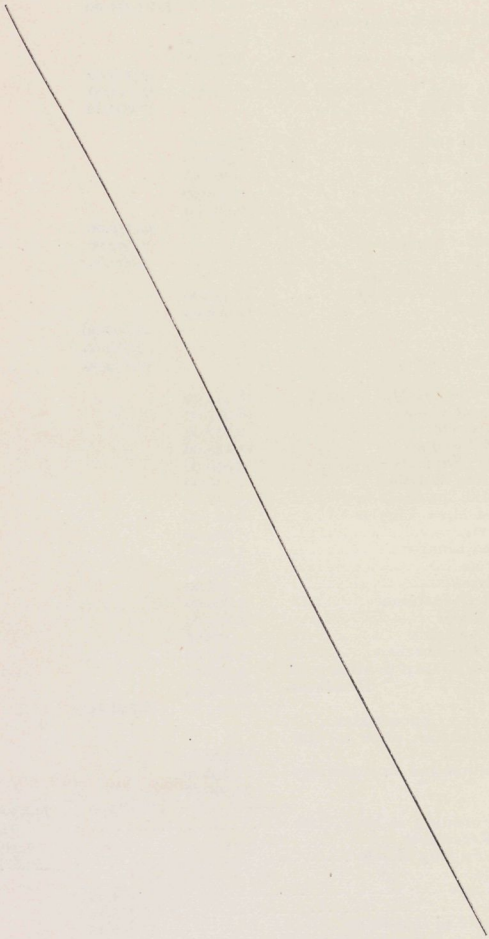
DECEMBER 1ST, 1904.

RESOURCES.

By Mines, Plantels, Water Rights, Concessions & Real Estate other than Buildings			$1,500,000.00
" Inventory, as below:			
" Mill Machinery:			
Mill Department	$125,202.00		
Laboratory	10,500.00		
Electrical Department	16,496.00		
Sorting Plant at Rosario	11,088.00		
		$163,286.00	
" Tramway and Gravity Road:			
Tramway	21,000.00		
Gravity Road	6,300.00		
		27,300.00	
" Machine Shop (Mechanical Department)		27,142.00	
" Air Drill Plant		37,800.00	
" Buildings:			
At Plantel and Village	17,640.00		
" Mine Levels	7,350.00		
" Colonia	1,500.00		
" Rosario	1,369.00		
" Peña Blanca	6,491.00		
		34,350.00	
" Surveyod's Implements		1,890.00	
" Live Stock		5,860.00	
" Surface Improvements:			
Surface Improvements	12,437.00		
Foundations	12,600.00		
		25,037.00	
" Agencies		3,784.00	
" Ore, Slimes, etc.		20,139.00	
" Supplies:			
Extra Parts for Mill	18,413.00		
Supplies at Mine	18,687.00		
Furniture, etc.	2,877.00		
General Supplies	13,045.00		
Mill, etc., Supplies	5,690.00		
Laboratory Supplies	2,146.00		
Main Mill Supplies, etc.	25,751.00		
Mill and Mine Supplies	8,402.00		
Tools, etc.	604.00		
Logs and Lumber	5,640.00		
Telephone	6,913.00		
Scrap Iron	525.00		
Medical Department	1,890.00		
Goods Afloat	5,172.00		
" Amapala	378.00		
" San Lorenzo	4,547.00		
" in Transit to Mine	5,578.00		
" " " Honduras	21,484.24		
		147,742.24	
" Bullion and Concentrates:			
Not settled for, prior to Oct. production	68,420.00		
Oct. Bullion and Concentrates.	77,250.00		
Nov. " " "	72,500.00		
		218,170.00	712,500.24
" Office Furniture in New York			1,043.50
" Notes Receivable			4,340.00
" New York City Bonds			50,875.00
" Cash, viz.:			
Petty Cash		18.49	
In Bank		7,305.84	
Drafts sold in Honduras		57,897.45	
On Hand in Honduras, October 1, 1904		17,763.93	
			82,985.71
" Sundry Debtor			5,000.00
" Zelaya Property account			170,000.00
" Thermopilae Mine			3,360.00
			$2,530,104.45

PROFIT AND LOSS ACCOUNT.

By	Bullion	$721,374.87
"	Interest	115.27
"	Acceptances and Notes Payable	150.00



$721,640.14

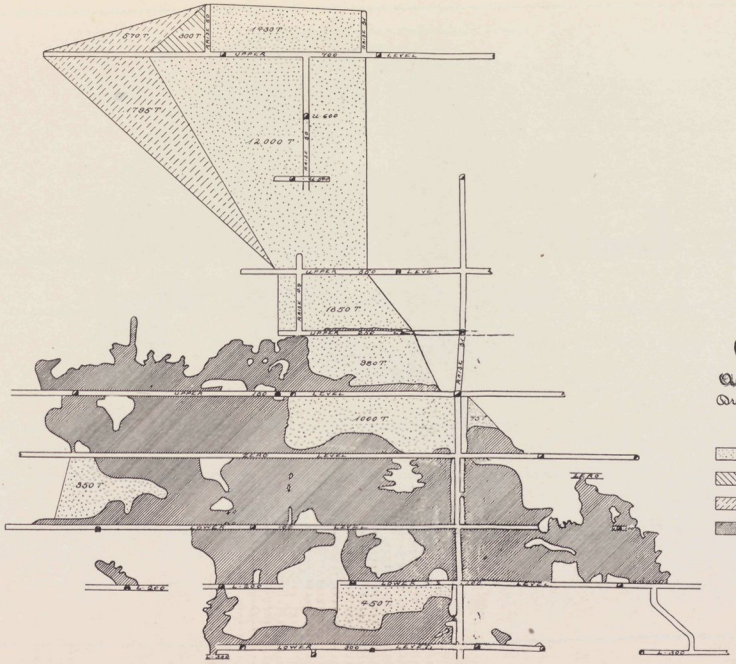
To General Supplies			$67,550.45
" Freight			5,753.40
" Dynamite			10,915.48
" Taxes			187.82
" New York City Bonds			58.33
" Salary			9,538.84
" Dividends			105,000.00
" Bullion Freight & Expense			9,871.16
" Insurance			2,986.07
" Postage			278.07
" Stationery			229.88
" Incidentals account			2,800.00
" Quicksilver			29,868.46
" Directors' Meetings			4,424.00
" Expense			4,431.07
" Cables and Telegrams			358.41
" Expenses in Honduras as per Supt's Ledger, viz:			
Mine Development	78,005.24		
Assaying and Sampling	6,372.59		
Tegucigalpa Expense	4,654.10		
Prospecting and Deadwork	85,662.48		
Building and Repairs	9,116.87		
Drainage	1,416.62		
Unclassified Labor	2,010.69		
San Lorenzo Expense	3,497.29		
Amapala Expense	3,438.70		
Concentrating	9,655.98		
Taxes	3,643.35		
General Expense	131,080.83		
Mining	224,820.15		
Surface Prospecting	821.00		
Freight	106,861.22		
Mine Timbering	25,228.02		
Underground Repairs	24,266.74		
Live Stock	11,847.00		
Police, Soldiers and Watchmen	11,911.57		
Underground Tramming	13,164.21		
Electric Haulage	10,914.32		
Crushing	10,558.04		
Amalgamating	29,788.56		
Tramway	10,288.27		
Ore Sorting	24,759.77		
Power	7,406.29		
Light	3,142.02		
Telephone	2,696.57		
Road Maintainance & Repairs	13,017.85		
Ice Plant	1,618.88		
Pensions	812.95		
Bodega	90,121.26		
Property Improvement	6,384.93		
	968,984.36	Pesos equal to gold.	396,842.72
			$651,094.16
Less Supplies, Improvements and Other Capital Stock Expenditure			55,470.00
			$595,624.16
Balance, Passed to Surplus Account			126,015.98
			$721,640.14

ANNEX AA.

The following amounts are made up to November 30th, in each fiscal year:

	Bullion Products.		Dividends.	
1882	$ 2,452.27			
1883	12,900.42			
1884	149,741.39			
1885	244,444.70			
1886	224,157.58			
1887	613,446.05	1887 No. 1	$	37,500
1888	767,632.15	1888 Nos. 2 to 5		60,000
1889	590,189.55	1889 Nos. 6 to 14		150,000
1890	113.28			
1891	369,587.19	1891 Nos. 15 to 16		30,000
1892	614,498.67	1892 Nos. 17 to 21		165,000
1893	492,534.87	1893 Nos. 22 to 25		150,000
1894	392,485.92	1894 No. 26		37,500
1895	158,164.42			
1896	449,525.88	1896 Nos. 27 to 28		30.000
1897	568,872.06	1897 Nos. 29 to 40		180,000
1898	611,467.76	1898 Nos. 41 to 48		120,000
1899	798,994.77	1899 Nos. 49 to 60		180,000
1900	827,443.12	1900 Nos. 61 to 75		225,000
1901	780,760.18	1901 Nos. 76 to 93		300,000
1902	490,273.34	1902 Nos. 94 to 100		105,000
1903	436,818.29	1903 No. 101		15,000
1904	721,374.87	1904 Nos. 102 to 108		105,000
	$10,317,878.73			$1,890,000

Annex A.

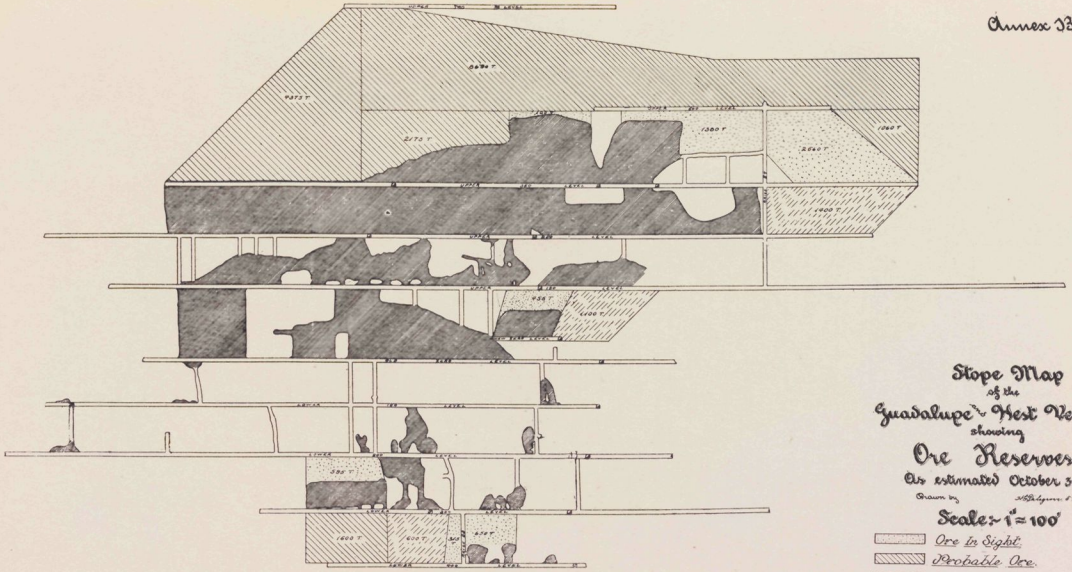


Stope Map
of the
Buena Ventura Vein
showing
Ore Reserves
As estimated October 30,'07
Drawn by H.B. Lyon

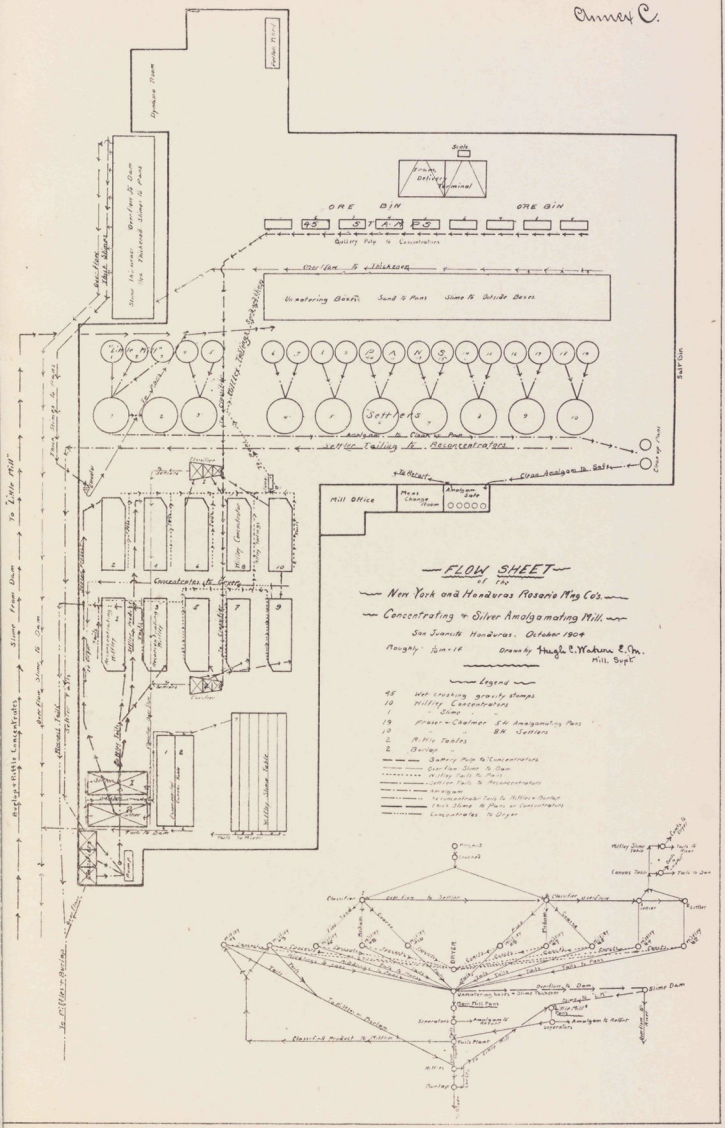
Scale: 1" = 100'

- Ore in Sight
- Probable Ore
- Possible Ore
- Ore Removed

Annex 33.


Stope Map
of the
Guadalupe & West Veins
showing
Ore Reserves
As estimated October 30, 04
Drawn by W.B. Symmes E.M.
Scale:- 1" = 100'
Ore in Sight.
Probable Ore.
Possible Ore
Ore Removed.

Annex C.



— FLOW SHEET —

of the

— New York and Honduras Rosario Mng Co's —

— Concentrating & Silver Amalgamating Mill —

San Juancito Honduras. October 1904

Roughly: Scale 1" = 16'

Drawn by Hugh C. Watson E.M.
Mill Supt

— Legend —

45	Wet crushing gravity stamps
10	Hilfty Concentrators
1	Slimer
19	Frazer & Chalmer 5 ft Amalgamating Pans
10	" " Bk Settlers
2	9 ft Vic Tubes
2	Barrier
— — —	Battery Pulp to Concentrators
———	Over Flow Slime to Dam
·····	Hilfty Tails to Pans
———	Settler Tails to Reconcentrators
———	Amalgam
———	Reconcentrator Tails to Hilfty or Barrier
———	Thick Slime & Pans or Concentrators
·····	Concentrates to Dryer

REPORT

OF THE

NEW YORK & HONDURAS ROSARIO MINING COMPANY

NEW YORK, DECEMBER 1st, 1905

1906
WYNKOOP HALLENBECK CRAWFORD CO.
NEW YORK.

OFFICERS 1905-1906

W. S. Valentine, *President.*
H. G. B. Fisher, *Vice-President.*
L. L. Clarke, *2d Vice-President.*
S. Heidelsheimer, *Treasurer.*
Ernest Schernikow, *Secretary.*

BOARD OF DIRECTORS 1905-1906

H. H. Babcock.
H. G. B. Fisher.
F. H. Parker.
W. S. Valentine.
L. L. Clarke.
S. Heidelsheimer.
E. J. Swords.
P. R. Weiler.
N. Westheimer.

EXECUTIVE COMMITTEE 1905-1906

Forrest H. Parker, *Chairman.*
L. L. Clarke.
P. R. Weiler.
S. Heidelsheimer.
N. Westheimer.

REPORT OF THE

New York & Honduras Rosario Mining Company

New York, December 1, 1905.

To the Stockholders:

Your last annual meeting found the Company's business in a condition which warranted presaging that "the dark period of our efforts seems now to have definitely passed." This year's results warrant us in adding that we have entered an era which bears every indication of permanent prosperity.

The salient difficulties that beset us have been overcome. The experience gained from the extraordinary occurrences will enable us to meet them should they be repeated. Reference is here had to the drought, which ruined the crops and destroyed the pastures very seriously. To avert the consequences, which threatened to become disastrous, we shipped large quantities of corn, beans and rice from here and San Francisco, which we furnished our employees at cost. The lack of pastures made it almost impossible to transport our supplies from the coast for many months.

Between January and March your President visited the properties and made a thorough inspection of the works as a basis for future improvements. He found the Camp well organized with an excellent staff of workers.

In September your Manager, Mr. J. H. Weddle, came to New York, and returned to the mines in October; this enabled full discussion with him of problems before us and maturing further plans of action.

RESERVE.

Our cash reserve last year was $182,533.00; *this year it is* $259,691.00; *making an increase of* $77,158.00. *Your Board has been firm in the idea of maintaining a solid foundation for your Company, thus safeguarding your business against all contingencies, and considers a minimum reserve of about* $250,000.00, *a conservative figure for such purpose. All profits above this will be distributed in dividends.*

We have paid 12% *on our Capital Stock, amounting to* $180,000.00.

The apparently large expense shown in the Treasurer's report is due to the fact that much thereof was devoted to the purchase of new machinery and to further developments.

MINE.

During the past year more has been accomplished in the mine than at any period of our existence; more development has been done, more ore laid bare, more improvements made and more definite knowledge obtained of what the future portends for our works.

Our Main Vein System, which a number of years ago had been disturbed and had turned from its true course, has gradually been working back, and our West Vein has shown such strength and character that we feel convinced of our again being on the true vein.

Our Main Level, the deepest of all, now about 1½ miles long, which for years has served only as an adit or working tunnel, as it never produced any ore, has changed and is now productive; this is one of the most encouraging conditions, as its continuance will bring it under our present heavy ore producers. In that event we have great depth to count on for future ore deposits.

Our Crucero property has been and is being steadily and persistently developed.

Our North Vein (running at right angles to our Rosario Vein), struck some months ago, is a strong, formidable vein and shows every indication of remaining so; it runs in the direct course of the Crucero Vein and gives hope of showing an interesting future.

Prospecting on the Jutiapa (or far western) side of our mountain has shown ore of similar formation, strike and dip to our Main Vein, thus proving that we have not only depth, but great length of vein formation.

Our ore extraction has been carried on in the most approved manner; we have taken the regular run of ore, without selection, our Mill assays showing little variation throughout the year. The tonnage has been larger than in any year past. Our mine is in better condition and makes a better showing than ever.

Our works have been systematically run so that our mining cost has been reduced from $26.14 *per ton last year to* $23.76 *per ton this year; during October,* 1905, *the cost was further reduced to* $19.12 *per ton. Steel rails have been laid in all working levels and another electric locomotive is now ordered. The ore-cleaning plant has been enlarged and improved.*

ORE TRANSPORTATION.

The Aerial Tramway has done good service and has been rebuilt; the lower terminal has been renewed and set on solid ground.

THE MILL.

Numerous changes, additions and improvements have been made in the Mill, which has also been thoroughly overhauled and improved. Our crushing capacity was limited to 1,500 *tons per month; last year it was increased to* 2,400, *and we can now crush as high as* 2,800 *tons per month.*

We have added more Wilfley Concentrating Tables and a Wilfley Slime Table. We have erected a series of Canvas Slime Tables, which has effected a large saving in catching the finer values held in suspension by the muddy water, and which otherwise could not be caught.

We are producing about 150 *tons of Concentrates per month.*

The large Cyanide Plant, capable of handling 50 *tons per diem, is nearing completion. We expect, with this plant, to increase our output materially and to reduce the amalgamation treatment.*

We have also shipped a Pebble Tube Slimer, which, when erected will, it is hoped, slime our table tails, so that they can be cyanided; this will considerably reduce the material now being amalgamated in our pans.

Your Board has not lost sight of the necessity of a new and larger Mill. Conservatism, however, obliges as a condition precedent more extensive developments before expending the large amount needed therefor.

A new and more powerful plant is now in course of com-

pletion; a new flume 7,634 feet long has been built and is being connected with a specially constructed Pelton Water Wheel developing 175 H. P. minimum. This wheel will drive an electric plant that will transmit power, not only to the Mill, Offices and Shops, but also to the Mine for driving the Air Drills and electric trains, as well as for lighting and other purposes.

LIGHTING.

The electric-lighting plant was erected a number of years ago. The improvements in this branch of industry have been of such rapid succession that your plant has become antiquated; it consequently was ever more and more difficult and expensive to acquire the spare parts needed to maintain the plant effectively. We therefore put in a most modern system, and now have installed an excellent service of both arc and incandescent lights.

INLAND TRANSPORTATION.

Up to the present time our work has been greatly hampered by the slow, uncertain and expensive pack-mule. The Government has now so improved the road from the Coast to the Capital as to make it transitable by wagons; after testing the various kinds of carts that commended themselves, we adopted finally the Packard Auto Car. We have shipped three of these in charge of competent men, and hope that by their use our freight expense will be materially reduced, and our effects more expeditiously handled.

IMPROVEMENTS.

Many new buildings have been erected and the older ones repaired.

We have planted extensive pastures for our stock to insure ample supply and economy in our fodder account.

A large shipment of Eucalyptus has been sent to the Mine, which will be raised on the ground whence timber has been cut away. This will in a few years produce good and inexpensive fuel.

LABORATORY.

We have established our own Laboratory on the 22d floor of this building, where we now do our own assaying. This obviates the large expense hitherto incurred by submitting our samples to outside assayers.

GOVERNMENT OF HONDURAS.

Our relations with the Government of Honduras are even more cordial than heretofore. We enjoy the full support and co-operation of all the Heads of Departments, and our works are a source of pride to the country.

STANDING.

We have maintained our position of high credit and stability and our relation with the general community remains most desirable.

MANAGEMENT.

Our Manager, Mr. J. H. Weddle, has fully met with our expectations in careful and intelligent management of our property. Comparatively few changes have been made

in our general staff, which proves the efficiency and good-will with which our work is being done.

We feel that this past year has been an extremely prosperous one for the Company and promise that your Board will leave nothing undone to further carry your works to even greater success.

Respectfully submitted,

W. S. VALENTINE,
President.

San Juancito, Honduras, C. A.,
November 20th, 1905.

To the President,
New York & Honduras Rosario Mining Co.,
New York City.

Dear Sir:—

I beg to submit the following report describing work done upon the Company's property in Honduras during the year ending October 1st.

GENERAL WORK AND TONNAGE.

Both Mine and Mill ran constantly throughout the year. At mine short delays were caused by necessary repairs on Mine Ore Chutes, and upon Electric Locomotive used for transporting ore in Rosario Tunnel. The miners also took their accustomed feast days at Easter and Christmas.

None of these, however, cut down the ore production. The Mill was fully supplied, and we have been able to store in the new bin above the Mill building sufficient ore to serve for several days, in case of accident to Tramway or Locomotive.

The Mill was shut down only for the necessary clean-ups, and in April last for five days to put in new main Driving Pulleys. No serious accident, however, occurred throughout the year to interrupt our operating.

The detailed statements which follow show the greatly increased tonnage at both Mine and Mill, and with reduced costs.

At Mine the saving both in labor and supplies will challenge your attention, and while this has been achieved its condition has been improved in every way. We have to-day a Mine which compares favorably in its methods of work and general appearance with up-to-date mining properties in the United States.

To further assist the work and reduce its cost we need greater air pressure for drills and ventilation. This will come with the completion of our new Power Plant. We need also more Electric Transportation for ore and waste in Peña Blanca or 700 Levels.

Comparison with last year's costs, which in turn were a large reduction from all previous years, show:

Tons of Ore delivered at Mill, dry weight	28,684.25	
" " " " for year ending Sept. 30, 1904	21,005.00	
Increase	7,679.25	tons
or increase per month	639.954	tons
Mine Cost per ton during year ending Sept. 30, 1905	$23.76	
" " " " " " " " 30, 1904	26.14	
A reduction per ton of	$2.38	

This, however, does not represent the saving being made. Costs for the first three months of the fiscal year October, November and December, 1904, were $28.27 per month, an increase over those of previous years.

Since January 1st, the time in which the present Superintendents took charge of the Mine, the costs for the remaining nine months to September 30th were $22.26 per ton, or

a reduction of $3.88 per ton, and during the past month (October) we have had mining costs of $19.12 per ton, with a record output of 3,054 tons sent to Mill.

Our Electric Locomotive took out of Rosario Tunnel 42,350 cars of ore, and 6,000 cars of waste, the greater part from raise 51, a distance of over a mile.

You will see at once that the capacity of both locomotive and track in Rosario are taxed, and that we must relieve them by taking out all waste above the Peña Blanca Level through the Upper 150 and 700 levels. This can only be done economically by electric transportation. Hand tramming is too expensive for the long distance from our stopes to the tunnel mouths.

At mill the work is greatly improved. In my last report I gave 85 tons daily as the maximum which we could treat, and this year's record shows an average tonnage of 82 9-10 tons put through every working day. We have now crowded the mill up to 90 tons, and the better work and better tonnage have cut down the labor cost. Unfortunately, the Chemicals and supplies make the great proportion of Milling expenses, and these can only be reduced when the Pans are relieved of the slimes and sands unfit for amalgamation, which will be eliminated upon completion of the Cyanide Plant. The difference in cost upon labor alone at mill during the year was 27 cents per ton dry ore crushed.

LABOR.

The average number of men employed during the year was:

Mine	Company's men	439	
"	Contractors and their helpers	139	
"	Men cutting and delivering timber to mine	47	
		625	625
Mill	Number of men employed		84
General labor	Plantel, construction, repairing roads, etc		186
	Total number of men employed daily		895

All these workmen appear upon the Company's weekly or monthly lists. Besides these we have a large number burning and delivering charcoal, cutting and hauling cord wood in the mountain, or hauling logs under contract; also freighters bringing up supplies and taking down Concentrates to the coast, 550 or 600 more—in all, some 1,500 men are working for the Rosario Company.

MINE.

The yearly Advance Sheet of Mine shows the following:

Drifts run	4,869 ft.
Upraises	2,565 "
Cross Cuts	869 "
	8,303 ft.

Stations cut: 4 Double track Stations on West Vein.

6 Timber Stations between 700 and Lower 350, on Buenaventura and West Veins.

Track in Peña Blanca Level straightened and relaid up to Block 66.

The Tunnels of Rosario, Lower 300, 200, Peña Blanca, and 700 have been retimbered and put in good condition.

Upper 900.

Three months ago we resumed driving this level, following the Guadalupe and West Veins. On the latter there are now but 60 feet left to connect with the raise at 57. The vein at this highest level has proved wide and gives good values. The connection which will be made during the present month will ventilate all the upper part of the mine. This work is most important. It shows that the West Vein continues strong up to, and above, this highest point of our our work in the Mine.

Upper 700.

Drifting to S. E.....	138 ft.
West Vein Heading advanced to Block 59, all in ore.....	335 "

Buenaventura, Raises 49, 50, and 51 were carried to the 900 level.

Cross cut in Block 50, connecting Buenaventura and S. W.

All the timber used above the 250 level is brought in through 700 level.

Upper 600.

West Headings advanced to Block 61.....	194 ft.
Buenaventura advanced East to Block 48.....	262 "

Buenaventura Cross Cut, from Raise 51 has been run to Guadalupe Vein on this level.

The 600 level is now connected by Raise 50 N. W. 49 and 51 B. V. 57, 60 and 61 West.

Upper 500.

West Heading advanced 540 ft. to Block 64	540 ft.
Guadalupe advanced to raise 50	450 "
B. V. on vein East, Heading now in Block 48	280 "
Catalina (new vein) South, in Block 64	50 "

Upper 350.

West Heading to Block 64	320 ft.
Catalina Vein in Block 63	105 "
Guadalupe Vein to Block 45	106 "

Upper 250.

West Vein to Block 63	275 ft.
Catalina Vein on line between Blocks 62 and 63	75 "
Buenaventura to Block 47	252 "

Upper 150.

West Heading advanced to Block 66	290 ft.
Catalina Heading advanced in Block 62	62 "

Zero Level.

No advance was made on this level, but stoping was done during the year on Buenaventura Vein, in Blocks 50 and 51.

Lower 100.

Buenaventura Vein. A quantity of ore was mined during the year in Blocks 48 and 49.

Lower 200.

West Vein. Ore was taken out from Blocks 55 and 56.

Lower 300.

A prospect drift was made to Block 32 on wide vein which did not prove of value ..... 157 ft.

Lower 400.

Guadalupe Heading East advanced to Block 52..... 84 ft.
On Rosario or Old West Vein heading was run East from Block 36, opening a considerable body of low-grade sulphide ore..... 222 "

Lower 650.

The work of driving this important level was resumed in latter part of August, and advanced..... 62 ft.
Progress is slow owing to bad air. When the New Power Plant is completed and we can put in Air Drills, advance will be faster.

PROSPECT WORK.

Candelaria.

Considerable work was done on this vein, first in cutting down the bottom of old Tunnel, in endeavor to make grade upon which cars could be run. Afterward the Level was driven 65 feet. No ore was encountered, the vein narrowed, and finally disappeared.

Concepcion.

The work of opening up and prospecting this property has been carried out and the most promising Heading was advanced 110 feet. The vein is strong but absolutely barren, and has produced no results.

Colonia.

Prospect work has continued with little interruption during the year. The Lower or No. 3 Tunnel has been advanced 350 feet to reach a point where good bodies of ore have been shown in the Levels above. An Upraise is now being made to connect with those Levels.

We have also cleaned up and opened out numerous pockets and small bodies of ore in the Upper Levels. Because of the cost of packing ore on mules, stoping was stopped early in the year. The ore bodies and pockets are blocked out, and make an important addition to our ore reserves. A wagon road is nearly completed from the Colonia to mouth of Lower 200, and the ore can be transported in this manner at reasonable cost when required.

The most important result of our prospecting work is the knowledge that the West Vein continues up to and above the 900 Level. A survey has been made, projecting this vein in the attempt to discover its outcrop on the south side of the mountain. The result so far indicates that it should be found near the point known as "Rancho Quemado." As we find old work done in various points at that region it seems probable that the outcrop on that side of the mountain carries values. This work will be prosecuted vigorously during the year.

MINE DEPARTMENT EXPENDITURES
For Year Ending October 1st, 1905.

Operations.	Total Labor.	Total Supplies.	Grand Total.
Assaying & Sampling...	$5,755.82	$3,888.07	$9,643.89
Building & Repairs.....	2,322.37	1,106.04	3,428.41
Development.....	144,950.32	18,855.20	163,805.52
Drainage.....	285.50	.....	285.50
Ore Breaking.....	224,492.98	53,378.97	277,871.95
Prospect & Deadwork..	69,262.42	14,584.80	83,847.22
Repairs Underground..	22,775.00	7,032.25	29,807.25
Property Improvement.	127.50	1,383.54	1,511.04
Timbering.....	30,230.83	10,966.58	41,197.41
Tramming Operations..	13,741.16	2,621.39	16,362.55
Tramming Repairs.....	3,922.41	3,274.59	7,197.00
Electric Haulage.....	13,967.98	7,211.37	21,179.35
General Expense.....	16,114.05	2,188.94	18,302.99
Power.....	840.00	112.84	952.84
Totals, Pesos.....	$548,788.34	$126,604.58	$675,392.92

STATEMENT SHOWING MINE PRODUCTION, COST PER TON AND AVERAGE FOR YEAR 1904-1905.

Months	Milling ore Produced. Tons.	Battery Assays. Ag. oz.	Battery Assays. Au. oz.	Days worked	Aver. tons per day.	Costs Per Ton. Labor.	Costs Per Ton. Supplies.	Costs Per Ton. Total.
1904								
October	2,214.85	69.63	0.26	26	85.19	24.48	4.86	29.34
November	2,138.18	72.10	0.29	26	82.30	20.50	5.02	25.52
December	2,099.26	62.94	0.26	26	80.74	24.70	5.24	29.94
1905								
January	2,284.00	74.70	0.25	26	87.80	18.84	4.97	23.81
February	2,293.00	73.70	0.25	24	95.50	18.24	4.85	23.09
March	2,420.00	73.70	0.25	27	90.00	20.97	4.41	25.38
April	2,159.00	75.70	0.22	23	93.90	17.78	5.05	22.83
May	2,426.00	69.20	0.18	27	89.90	17.46	3.51	20.97
June	2,550.00	71.40	0.18	26	98.00	19.37	3.33	22.70
July	2,638.00	71.40	0.15	27	97.70	16.75	3.73	20.48
August	2,803.55	70.30	0.16	27	103.83	15.20	4.21	19.41
September	2,658.41	69.90	0.16	25	106.33	17.42	4.31	21.73
Totals	28,684.25	854.67	2.61	310	1,111.19	231.71 Pesos	53.49 Pesos	285.20 Pesos
Monthly average	2,390 $\frac{354}{1000}$	71.22	0.21	25 $\frac{8}{10}$	92.60	Pesos 19.31	Pesos 4.45	Pesos 23.76

ORE RESERVES.

The following statement of Ore Reserves has been prepared by the Mine Superintendent, Mr. Ralph Weddle, assisted by Mr. H. J. Meisel, Mine Engineer. The basis of calculation allows 12 cubic feet to the ton of ore throughout; galena, pyrite, and quartz, making closer measurement than was done last year, where 9 cubic feet only were allowed upon the heavier ores.

The estimate below includes only "Ore in sight," *i. e.*, that proved on three sides; and "Ore exposed on two sides."

Upon the Stope maps attached showing and locating these reserves there are indicated by arrows the ore bodies that it is usual to call "Prospect Reserves," but these are not included in the ore reserve tonnage this year. The statement is confined to what can be seen on two or more sides and thereby measured. This places before you a more conservative estimate than in the two previous years' reports. I will say further that the 20,000 tons of last year's reserve which has been taken out for use during this year have more than borne out our estimate, in size of veins and values. The reserve in the new "Catalina" vein indicated as "probable ore" has since been developed on three sides and proved to be of high grade. It can therefore at this date be classed as "Ore in Sight."

Vein.	Level.	Block.	Tons ore in sight, proved on three sides.	Ore exposed on two sides.
Guadalupe and West Veins.....	700	54 to 57	4,050	....
	700	50 " 54	....	1,500
	700	57 " 60	....	4,500
	600	54 " 55	2,225	....

ORE RESERVES (Continued.)

Vein.	Level.	Block.	Tons ore in sight, proved on three sides.	Ore exposed on two sides.
Guadalupe and West Vein.	600	56 to 57	3,225	....
	600	57 " 60	6,250	....
	600	W. of 60	....	3,000
	500	43 to 50	....	5,200
	500	50 " 52	2,225	....
	500	54 " 57	1,525	....
	500	57 " 60	3,000	....
	500	60 " 61	3,200	....
	500	W. of 61	....	6,500
	350	60 to 61	1,875	....
	350	57 " 60	500	....
	350	W. of 61	5,000	....
	250	57 to 60	1,800	....
	250	60 " 62	2,100	....
	150	60 " 61	150	....
	300	49 " 50	575	....
	400	49 " 50	1,500	....
			39,200	20,700

Vein.	Level.	Block.	Tons of ore in sight.	Ore proved. on two sides
Buenaventura—Upper..	700	49 to 50	1,250	....
	700	50 " 51	2,750	....
	600	49 " 50	....	1,000
	600	49 " 51	4,900	....
	500	49 " 51	3,800	....
	350	49 " 51	750	....
	150	49 " 51	200	....
	150	49 " 51	150	....
	150	49 " 51	980	....
Lower..	200	50 " 51	450	....
			15,230	1,000

Vein	Level	Block	Tons of ore in sight.	Ore proved on two sides.
Rosario or Old West Vein—Lower.....	400	35	700	....
	400	36	600	....
	650	36	1,000	....
	650	40	2,000	....
	400	32	....	1,250
	400	36	....	300
	650	33 to 36	....	2,470
			4,300	4,020
Catalina.....	350	63	....	1,250
	250	62 to 63	....	1,000
	150	62	....	800
			....	3,050
Colonia.....	...	.....	3,325	1,750

SUMMARY.

	Ore in Sight.	Proved on Two Sides
West.....	39,200 tons	20,700 tons
Buenaventura.....	15,230 "	1,000 "
Rosario, or Old West.....	4,300 "	4,020 "
Catalina.....	..... "	3,050 "
Colonia.....	3,325 "	1,750 "
	62,055 tons	30,520 tons
Total.....		92,575 tons

Comparison with exhibit of Reserves last year gives increase of Ore in Sight.....	38,125 tons
Increase of Ore Exposed on Two Sides.....	12,320 "
Total increase over last year's report.....	50,445 tons

Besides the foregoing, there are fully as much in the class usually known as "Prospect Reserves," as in last year's report.

All this we have after taking out 28,433 tons, dry weight, used during the year past.

When you consider that our veins are narrow, the rock hard, and the labor necessary for each foot of advance, you must feel that this development of your property, and increase in your ore reserves, has rarely been equalled in mines of this class.

TRAMWAY AND SORTING PLANT.

The larger quantity of ore mined and sent to Mill has kept the Sorting Plant running up to its capacity. Five more tanks have been placed below the plant to settle more thoroughly the fines and slimes, which then pass over a Canvas Table. This last gives an appreciable saving, and encourages us to increase the area of this Canvas Plant. The above tanks and Tables have materially reduced the loss from Slimes and fines passing away with the water used to clean the ore at Rosario.

At Tramway it has been necessary to put on a regular night shift to carry our tonnage, and give opportunity to stop during the day for necessary repairs to Cable or Towers.

The following Statement shows details of ore handled by the Tramway and its cost. The wear upon cable is proportionate to the quantity carried, and a rope lasts now only eight to nine months. The cost per ton of transporting, however, has been reduced eleven cents during the past year.

Four Towers have been rebuilt and a number made higher, equalizing in part the grade. Several more must be raised during the coming months, which should make the tram run smoother and increase the life of the cables.

TRAMWAY AND SORTING PLANT EXPENDITURES

For Year Ending October 1st, 1905.

	Total Labor.	Total Supplies.	Grand Total.
Tramway.....	17,723.07	11,438.53	29,161.60
Ore Sorting.....	21,208.53	3,209.33	24,417.86
General Labor.....	944.27	28.54	972.81
Assaying & Sampling.	1,123.96	.....	1,123.96
Totals.....	40,999.83	14,676.40	55,676.23

STATEMENT SHOWING WORK OF TRAMWAY AND SORTING PLANT

For Year 1904-1905.

Months.	Dry Tons Trammed.	No. of Buckets.	Hours Run.	Average Tons Per 12 Hours.	Costs Per Ton. Labor.	Supplies.	Total.
1904							
October	2,214.85	48,459	310	85.07	1.48	0.47	1.95
November	2,138.18	45,657	305¼	85.53	1.53	0.62	2.15
December	2,099.26	42,647	279½	90.10	1.65	0.41	2.06
1905							
January	2,284.00	50,443	322¼	84.60	1.07	0.49	1.56
February	2,293.00	47,016	311¼	88.20	1.17	0.49	1.66
March	2,420.00	52,704	346	83.40	1.41	0.45	1.86
April	2,159.00	48,205	352½	74.50	1.44	0.58	2.02
May	2,426.00	57,135	458	63.60	1.21	0.50	1.71
June	2,550.00	54,837	386¾	79.20	1.81	0.50	2.31
July	2,638.00	51,847	318¼	99.50	1.59	0.42	2.01
August	2,803.56	54,807	439	76.60	1.36	0.76	2.12
September	2,658.40	50,262	419¼	76.00	1.39	0.41	1.80
Totals	28,684.25	604,019	4,248	986.30	17.11	6.10	23.21
Monthly average..	2,390.35	50,335	354 Hours, or 29.5 days of 12 Hours.	82.19	1.43	0.50	1.93

MILL.

Of the value extracted from ores treated at Mill during the year, there was taken out:

By Concentration..... 67 3–10 %
By Amalgamation..... 32 7–10 %

The following Statement shows proportion of costs to value of product, viz.:

Concentrates..... 20.77 % of value
Bullion..... 42.08 % of value

In this I include the entire cost of Ocean Freight and smelter treatment upon bars and concentrates. You will note that both are higher than last year. This is caused by greater repairs and improvements at Mill, smelter charges and freight upon concentrates raised from $23.00 to $24.50 per ton in New York, and I have reduced the life of sacks to four trips. The scarcity of mules and high price of freight to the coast, since January last, is responsible for a large part of the increase. With the adoption of Autocars a large saving will be made in this transportation.

MILL DEPARTMENT EXPENDITURES
(Exclusive Freight on Product)
For Year Ending October 1st, 1905.

Operations.	Total Labor.	Total Supplies.	Grand Total
Assaying & Sampling..	5,229.85	14,156.23	19,386.08
Crushing.....	9,974.91	10,715.15	20,690.06
Concentrating.....	17,783.86	26,170.58	43,954.44
Amalgamating.....	37,053.56	184,716.75	221,770.31
Cyaniding.....	3,979.37	321.44	4,300.81
General Expense.....	16,674.88	5,157.06	21,831.94
Totals, Pesos.....	90,696.43	241,237.21	331,933.64

STATEMENT SHOWING MILL PERFORMANCE.

Cost Per Ton and Monthly Average for Year Ending October 1st, 1905.

Months.	Dry Tons Crushed.	Battery Assay. Ag. Oz.	Au. Oz.	No. of Bars.	Value of Bars.	Tons of Concentr.	Value of Concentr.	Total Value of Product.	Costs Per Ton. Labor.	Supplies.	Total
1904											
October.....	2,209.00	69.63	0.26	25	$21,550.98	86.340	$50,061.39	$71,612.37	3.31	9.73	13.04
November.....	2,143.03	72.10	0.29	20	19,070.15	99.312	46,182.50	65,252.65	3.45	10.12	13 57
December.....	2,097.28	62.94	0.26	20	17,077.34	85.312	37,705.69	54,783.03	3.93	8.65	12 58
1905											
January.....	2,214.00	74.70	0.25	27	24,114.73	86.225	42,561.97	66,676.70	3.33	8.96	12 29
February.....	2,293.00	73.70	0.25	30	26,334.44	90.365	46,207.72	72,542.16	3.06	9.50	12 56
March.....	2,420.00	73.70	0.25	25	20,835.02	91.865	52,077.94	72,912.96	3.31	7.92	11.23
April.....	2,153.00	75.70	0.22	24	20,015.02	84.957	47,794.27	67,809.29	3.44	9.38	12.82
May.....	2,426.00	69.20	0.18	28	25,100.97	101.020	48,392.54	73,493.51	3.11	8.14	11 25
June.....	2,550.00	71.40	0.18	35	31,043.17	99.165	48,961.11	80,004.28	3.33	8.05	11 38
July.....	2,587.00	71.40	0.15	Matte 1 31	26,754.54	118.474	49,690.19	76,444.73	2.63	7.52	10.15
August.....	2,737.00	70.30	0.16	28	25,216.63	126.561	54,431.89	79,648.52	2.52	7.26	9.78
September.....	2,598.00	69.90	0.16	35	30,695.36	110.686	52,105.94	82,801.30	3.09	7.40	10.49
Totals.....	28,433.31	854 67	2.61	329	$287,808.35	1,180.282	$576,173.15	$863,981.50	38.51	102.63	141.14
					U. S. G.		U. S. G.	U. S. G.		Pesos.	
Monthly average.	2,369.44	71.22	0.21	27⅔	$23,984.02	98.357	$48,014.43	$71,998.45	3.21	8.55	11.76

COMPARISON OF COST IN THE PRODUCTION OF BULLION AND CONCENTRATES
For Year Ending October 1st, 1905.

Operations.	Bullion.		Amounts.	Concentrates.	Amounts.
Crushing			3,324.97		6,649.94
Concentrating					17,783.86
Amalgamating			37,053.56		
Cyanide Tests			1,326.46		2,652.91
Power			2,211.36		4,422.74
Assaying and Sampling			1,743.28		3,486.57
General Mill Labor			8,337.44		8,337.44
Chemicals			184,716.75		
Extra Parts for Mill			5,357.58		31,528.15
General Supplies			9,817.36		9,817.37
Bullion Train and Guards			4,028.30		
Freight on Concentrates					73,658.89
Total Expense on Product	329 Bars Bullion containing ag. oz. 539,333.40 & au. oz. 877.71	Pesos	257,917.06	1,180 388/600 tons Concentrates containing ag. oz. 1,012,324 63/100 & au. oz. 3,362 10/100	Pesos 158,337.87
Exchange 150% premium		U. S. $	113,166.82		U. S. $ 63,335.13
Ocean freight and treatment	329 Bars at $24.15 each		7,945.35	1,180 388/600 tons Concentrates at $24.50 each	28,916.91
Smelter Deduction		U. S. $		5% on oz. ag 1,012,324 63/100 = oz. 50,616 33/100 at 50 cts.	25,308.12
Cost of Sacks				at the rate of $1.92 gold per ton of product figuring 4 trips to each, Inner and Outer Sacks	2,266.14
		Total Cost,	$121,112.17	Total Cost	$119,826.30
Value of Product for Year, ag. 50 cts.	U. S. $287,808.35			U. S. $576,173.15.	
Cost of Production	42.08% of value.			20.77% of Value.	

PRODUCT AND COSTS.

Total ounces silver produced in Bars	539,333.40
Total ounces silver produced in Concentrates	1,012,324.63
Total ounces Silver	1,551,658.03
Total ounces of Gold produced in Bullion	877.71
Total ounces of Gold produced in Concentrates	3,362.10
Total ounces Gold	4,239.81

While expenses have been swelled by higher mule freights, greater quantity of work done on roads, etc., the total cost of Mining and treating our ore, including delivery f. o. b. Amapala, shows reduction of $5.37 per ton of ore delivered to Mill.

IMPROVEMENTS, REPAIRS AND GENERAL EXPENSE SHEET

For Year Ending October 1st, 1905.

Operations.	Total Labor.	Total Supplies.	Grand Total
Building & Repairs	10,931.32	5,166.76	16,098.08
Power	4,614.64	1,066.62	5,681.26
Light	3,752.47	2,128.42	5,880.89
Telephone	1,933.59	212.10	2,145.69
Ice Plant	1,159.12	690.23	1,849.35
Road Construction & Repairs	15,203.02	534.52	15,737.54
Police, Soldiers. & Watchmen	11,207.28	113.44	11,320.72
Office Management, etc.	53,405.12	3.10	53,408.22
Pensions	906.22	.....	906.22
General Labor	6,720.28	102.58	6,822.86
General Expense	79,283.88	4,459.19	83,743.07
Property Improvement	3,713.79	724.40	4,438.19
Schools	3,027.91	37.50	3,065.41
Taxes	3,793.35	.....	3,793.35
Totals	199,651.99	15,238.86	214,890.85

RECAPITULATION COSTS PER TON ORE
For Year Ending October 1st, 1905.

Accounts.	Amounts.	
MINING (per ton delivered at Cleaning Plant):		
Assaying and Sampling	$0.33	
Building and Repairs	0.12	
Development	5.75	
Drainage	0.00¼	
Ore Breaking	9.78	
Prospecting and Deadwork	2.96	
Repairs Underground	1.05	
Property Improvement	0.05⅛	
Timbering	1.45	
Tramming Operation	0.57	
Tramming Repairs	0.25	
Electric Haulage	0.74	
General Labor	0.63	
Power	0.07⅝	
		$23.76
CLEANING (per ton delivered at Mill):		
Ore Sorting	$0.82	
Assaying and Sampling	0.05	
		$0.87
TRAMWAY (per ton delivered at Mill):		
Conveyance to Mill	$1.06	
		$ 1.06
MILLING (per ton crushed):		
Crushing	$0.73	
Concentrating	1.57	
Amalgamating	7.84	
Cyanide Tests	0.15	
Assaying and Sampling	0.69	
General Labor	0.78	
		$11.76
Forward		$37 45

	Forward.....	$37.45
FREIGHT ON PRODUCT:		
Total paid out, Pesos, 77,687.19.....	.....	
Total tons crushed.....28,433.31.....	.....	
		$2.73
IMPROVEMENTS, REPAIRS AND GENERAL EXPENSE (per ton crushed):		
Building Repairs.....	0.57	
Power.....	0.19	
Light.....	0.20	
Telephone.....	0.08	
Ice Plant.....	0.06	
Roads, Construction and Repairs.....	0.55	
Police, Soldiers and Watchmen.....	0.41	
Office Management, Clerks, Bodega, Foremen....	1.88	
Pensions.....	0.04	
General Labor.....	0.25	
General Expense, Agency Expense, etc.....	2.96	
Improvements.....	0.16	
Schools.....	0.12	
Taxes.....	0.13	
		$7.60
TOTAL COST PER TON, F. O. B. AMAPALA.....PESOS		47.78

CONSTRUCTION.

The Cyanide and New Power Plants, planned in February and March last, have been greatly delayed by inability to bring up material from the Coast during the Summer and early fall. Barely enough mules could be got together to bring up food for our people and current supplies for Mill and Mine. We have lost six or eight months from these unfortunate conditions.

The delay in shipping electric and other machinery from the manufacturers in the United States has also kept back work in part.

Most of the material has now reached here, and the construction is being pushed with all speed possible. If no unfortunate delays occur I hope to have the Cyanide Plant ready soon after January 1st. We shall not, however, be able to run it fully until completion of the new Power Plant, but we hope to obtain sufficient power from our present mill to run in part at least, and will hasten conclusion of the new Pipe, Flume, and Electric Power Line.

IMPROVEMENTS.

The following are the more important made upon our property during the past year. Those which can be classed as construction and appear in Inventory increased its value $70,343.59. The greater portion of the improvements have been charged into our monthly expenses and included in the costs of our year's production.

(1.) New Timber Road, about a mile in length, built on mountain to bring Timber to the mouths of the 900 and 700 Tunnels.

(2.) New stone blacksmith and machine shop at mouth of 200 level.

(3.) Two timber framing sheds at mouth of 700 level. All timbers are now framed outside the Mine on contract, making considerable saving of expense and time of underground timbermen.

(4.) At 200 level, one Masonry Store house for storing Powder, Candles, etc.

(5.) One Cement dwelling house for miners.

(6.) One frame dwelling house.

(7.) One Cement house for Locomotive and Electric Power at Rosario Level.

(8.) New Settling Tanks and Canvas Plant at Rosario Level.

(9.) New Building for Tramway terminal, with Retaining Walls at mill.

(10.) Assistant Manager's House at San Juancito.

(11.) New Cement dwelling house, 45x18', four rooms, at San Juancito.

(12.) New Cement School building.

(13.) New Cement Store house for grain.

(14.) New Cement Store house for lime.

(15.) New Cement Store house for concentrates.

(16.) Two Wilfley tables, additional at mill.

(17.) One Canvas Plant, additional at mill.

(18.) New Assay furnaces, and Ainsworth Balance in Laboratory.

(19.) Pastures:—

a. Between Rosario and 200 level, one Pasture fenced and planted with grass.

b. Two large Pastures on Escobales cañon.

c. One Pasture above mill.

(20.) Sheds, Buildings, and Yard for making bricks.

(21.) At Tegucigalpa Agency new Fire and Burglar Proof Safe.

(22.) At San Lorenzo one new Building, 150 yards from Agency, to contain salt and gasoline, surrounded by barbed wire fence.

CONCLUSION.

The Town of San Juancito has been bettered in the twelve months just expired. New and capacious stores have been erected by merchants. Several good dwelling houses put up in what was formerly the Banana patch. A new Street put through, graded, and paved in "El Pueblo Nuevo." Comfortable houses built by numerous employés between San Juancito and El Plan, and upon the hillsides about the town.

The Brass Band organized a year ago has proved a source of pleasure to the people, and renders Sundays and holidays more peaceable and enjoyable.

The past has been a disastrous year for the country of Honduras. On the north coast the exportation of Fruit and Hard Woods, which had grown to large proportions, was suddenly cut off by an outbreak of fever, which closed all the ports for nearly five months, while failure of the harvest brought famine throughout the interior. Owing, however, to your shipments of corn and beans, our people of San Juancito were fed and cared for, and we were able to assist in some measure those about us. The harvest this year is not yet assured, and we may be compelled to call for similar provision in the coming Spring.

With much pleasure I call to your attention the excellent service rendered by the staff and principal employés. All have worked with earnest, untiring efforts for the welfare and prosperity of the Company. That greater success than before has crowned our year's record comes from their intelligent and well directed labor. To select any for special

commendation would be unfair to the others. All have done well.

The outlook for the coming year is surely encouraging. Our present output (90 tons daily) can hardly be increased. Our Electric Locomotive, Gravity Tramway and Mill are all working up to capacity. We can, however, hope for a better extraction of values with the help of the Cyanide treatment, saving of freight between here and the coast, and a further reduction of costs at Mill and Mine when we have sufficient Power from our New Water and Electric Plant to run our full number of stamps throughout the year, and for our drills and ventilation at the latter. With these to assist we can look forward to greater economy in working and higher results in the year before us.

Yours truly,

J. H. WEDDLE,
Manager.

New York City,
December 1, 1905.

To the President and Board of Directors.

Gentlemen:

Herewith I present the Treasurer's statement of the finances of the company as it appears on our books on this date.

I invite examination and comparison of the figures with those of last year, feeling assured that it will cause general satisfaction to our stockholders to note the healthy condition of same.

Last year our surplus was $966,101.99, and we paid seven dividends amounting to $105,000.00. This year our surplus is $1,141,795.23, and we paid twelve dividends amounting to $180,000.00.

We have produced during the year 1,606,158 ounces of silver and 3,985 ounces of gold, value in total being $993,-065.39. Our expenses were, Gross, $676,375.15; of this approximately $115,000.00 have been taken out for moneys properly applicable to dividends, for payment for improvements,betterments and development work, all of which were not intended for immediate profit-makers, but redound to the future value of our property.

Delays in transportation during the year held back the shipping of Concentrates and Bullion from the Mine, causing some trouble in turning same into cash, and holding us very

short in ready money, but these troubles passed and we are again in our normal condition.

We have kept our works bountifully covered with all material, supplies, etc., and now have on hand a large and varied stock of everything requisite for steady working.

As will be noted in the statistical part of this report, we have materially increased in Concentrates production, met by a proportionate decrease in Bullion—as the former is by far the cheaper to work, it makes a valuable showing in our production cost. On completion of our Cyanide Plant we hope to still further reduce our Amalgamating works and treat same by Cyanide, thus causing a large saving in quicksilver and chemicals, besides increasing our production.

Annex A shows the amount produced each year, since our organization, amounting to $11,310,944.12, and dividends paid, amounting to $2,070,000.

The recent rise in Silver has been a beneficial one for us, and it is to be hoped that same will maintain.

The Audit of our Books was made by the Security Audit Company of New York, whose report is hereto attached.

Respectfully submitted,

S. HEIDELSHEIMER,
Treasurer.

THE SECURITY AUDIT COMPANY OF NEW YORK.

128 Broadway, New York, Dec. 11, 1905.

To the President and Board of Directors of the New York & Honduras Rosario Mining Co., New York, N. Y.

Gentlemen:

In compliance with your instructions we have audited the books of account of your corporation at your office in this city for the fiscal year from December 1, 1904, to November 30, 1905, and certify that—subject to the valuation of the inventories—the same are correct and in accordance with the Balance Sheet and Profit and Loss Account annexed hereto and forming part of this report. We repeat, however, what we said in our report for the previous year, that the ledger account for the expenses at the mines, which we have audited, did not record the expenses for the above fiscal year, but for the period from October 1, 1904, to September 30, 1905, which is in conformity with the method heretofore applied to this account; also that the inventories of assets in Honduras were taken October 1, 1905. In order to show the exact financial condition of your corporation at the end of the fiscal year, the said expenses, up to November 30, 1905, should have been included, and inventories taken that day, but such a measure would considerably delay the closing of the books here owing to the slow communication with the mines.

The net profit for the year, amounting to $360,561.48, has been applied as follows:

1. Payment of Dividends			$180,000.00
2. Increase in value of			
Plant, Machinery, Developments	$57,189.93		
Bullion, Concentrates, Ore and Supplies on hand	57,335.25		
Bills and Accounts Receivable and Cash in hand of Superintendent	50,920.56		165,445.74
3. Reduction in Loans and Bills Payable			15,115.74
			$360,561.48

Respectfully submitted,

THE SECURITY AUDIT CO. OF N. Y.,

(Seal) GEORGE WEAVER, *Secretary.*

CONDENSED BALANCE SHEET.
As of November 30, 1905.

ASSETS:		
Mines, Real Estate other than buildings, Concessions, etc.	$1,698,565.00	
Tramway and Gravity Road	27,300.00	
Buildings	37,539.00	
Machine Shop	27,142.00	
Air Drill Plant	37,800.00	
Mill Machinery	189,022.00	
New Power Plant	15,861.00	
Honduras Transportation Outfit	9,943.30	
Laboratory Outfit	700.13	
Surveyors' Implements	1,890.00	
Office Furniture in New York	1,230.00	
Inventory at Agencies	4,267.00	
Live Stock	6,783.00	
Bullion and Concentrates	245,000.00	
Ore, Slimes, etc.	21,782.00	
Supplies	176,604.49	
Cash	4,960.98	
New York City Bonds, 1911, par value $50,000	50,875.00	
Bills and Accounts Receivable	9,640.00	
Superintendent's Account in Honduras	123,777.05	
LIABILITIES:		
Bills Payable		$48,886.72
Capital Stock		1,500,000.00
Surplus		1,141,795.23
	$2,690,681.95	$2,690,681.95

PROFIT AND LOSS ACCOUNT
For the Year Ended November 30, 1905.

To Bullion and Concentrates on hand or in transit December 1, 1904.		$218,170.00	
" Ore, etc., on hand October 1, 1904. . . .		20,139.00	
By Bullion and Concentrates sold during the year.		. . . . .	$966,235.39
" Bullion and Concentrates on hand or in transit November 30, 1905.		. . . . .	245,000.00
" Ore, etc., on hand October 1, 1905		. . . . .	21,782.00
To Operating Expenses (see remarks in report).		608,801.57	
" Balance, Gross Profit.		385,906.82	
		$1,233,017.39	$1,233,017.39
By Balance carried down.		. . . . .	$385,906.82
" Miscellaneous Income.		. . . . .	399.25
To Rent of Office and Laboratory.		$2,050.08	
" Salaries.		11,663.96	
" Directors' Meetings.		3,632.00	
" Stationery.		247.74	
" Postage.		280.32	
" Cables and Telegrams.		442.08	
" Laboratory.		120.00	
" Legal Expense.		65.00	
" Taxes.		17.23	
" General Expense.		2,960.88	
" Honduras Examination.		4,124.20	
" Interest, Paid.	$1,641.10		
Received.	1,500.00	141.10	
		$25,744.59	
" **Balance, being Net Profit for Year** . .		360,561.48	
		$386,306.07	$386,306.07

SURPLUS ACCOUNT
November 30, 1905.

By Balance, December 1, 1904		$966,101.99
To Note dated January 19, 1893, considered of no value	$500.00	
" Bad Debts from 1891 to 1902 at the mines	4,368.24	
By Net Profit for year ended November 30, 1905		360,561.48
To Dividend Paid during the year	180,000.00	
To Balance	$1,141,795.23	
	$1,326,663.47	$1,326,663.47
By Balance, November 30, 1905		$1,141,795.23

NEW YORK, December 1, 1905.

To the President and Board of Directors
of the New York & Honduras Rosario Mining Co.

Gentlemen:

The policy of improvement and progress begun some time ago has been maintained during the year just ended, and its effects are reflected in the very satisfactory reports on preceding pages.

Special attention is directed to that part of our Manager's Report relating to present ore reserves, and to emphasize this it may not be amiss to repeat his figures:

Tons of ore in sight	62,055
Proved on two sides	30,520
A total of	92,575

The increase in tons of ore in sight over last year is 38,125 tons, the increase of tons of ore exposed on two sides being 12,320, making a combined total of 50,445 tons more than a year ago. The ore known as "prospect" is about the same in quantity as last year. All the preceding notwithstanding that 28,433 tons were extracted and worked during the year.

A large amount was expended in the purchase of extraordinary supplies, material for the cyanide and new power plants, Auto trucks for freight conveyance, etc. Owing to difficulties in transportation of freights, the material for the new plants was delayed much beyond the time it should

have reached the Mine. Nearly the whole of it is now on the ground and the Cyanide plant is expected to be in operation early in 1906; the new power plant should be completed about the same time.

An electric locomotive, intended to relieve the present one, is ordered and will be shipped before the end of the year.

A satisfactory showing in our inventory values is to be noted, the principal ones being: The Mill Department increased by $25,736, represented by improvements and additions. New buildings constructed and old ones repaired has increased their value by $3,189. A total of $15,861 was expended during the year for material and labor for the New Power plant, which amount is added to the inventory. The total increase in inventory value is $48,003.

The total amount expended for the new freight-carrying Auto trucks is $9,943.30; and a large saving in freight charges will be made in the employment of these trucks.

Respectfully submitted,

ERNEST SCHERNIKOW,

Secretary.

ANNEX A.

The following amounts are made up to November 30th, in each fiscal year:

Bullion Production.		Dividends.		
1882	$2,452.27			
1883	12,900.42			
1884	149,741.39			
1885	244,444.70			
1886	224,157.58			
1887	613,446.05	1887	No. 1	$37,500
1888	767,632.15	1888	Nos. 2 to 5	60,000
1889	590,189.55	1889	Nos. 6 to 14	150,000
1890	113.28			
1891	369,587.19	1891	Nos. 15 to 16	30,000
1892	614,498.67	1892	Nos. 17 to 21	165,000
1893	492,534.87	1893	Nos. 22 to 25	150,000
1894	392,485.92	1894	No. 26	37,500
1895	158,164.42			
1896	449,525.88	1896	Nos. 27 to 28	30,000
1897	568,872.06	1897	Nos. 29 to 40	180,000
1898	611,467.76	1898	Nos. 41 to 48	120,000
1899	798,994.77	1899	Nos. 49 to 60	180,000
1900	827,443.12	1900	Nos. 61 to 75	225,000
1901	780,760.18	1901	Nos. 76 to 93	300,000
1902	490,273.34	1902	Nos. 94 to 100	105,000
1903	436,818.29	1903	No. 101	15,000
1904	721,374.87	1904	Nos. 102 to 108	105,000
1905	993,065.39	1905	Nos. 109 to 121	180,000
Total,	**$11,310,944.12**		**Total,**	**$2,070,000**

BALANCE SHEET,

To Capital Stock	$1,500,000.00
" Acceptances and Notes Payable	48,886.72
" Surplus Account	1,141,795.23
	$2,690,681.95

DECEMBER 1st, 1905.

By Mines, Plantels, Water Rights, Concessions & Real Estate other than Buildings			1,500,000.00
" Inventory as below:			
Mill Machinery:			
Mill Department	$132,203.00		
Cyanide Plant	13,662.00		
Electrical Department	21,198.00		
Sorting Plant, Rosario	11,088.00		
Laboratory	10,871.00		
		$189,022.00	
" Tramway & Gravity Road:			
Tramway	$21,000.00		
Gravity Road	6,300.00		
		27,300.00	
" Machine Shop (Mechanical Department)		27,142.00	
" Air Drill Plant		37,800.00	
" Buildings			
At Plantel and Village	$20,177.00		
" Mine Levels	7,677.00		
" Colonia	1,500.00		
" Rosario	1,370.00		
" Peña Blanca	6,815.00		
		37,539.00	
" Surveyors' Implements		1,890.00	
" Live Stock		6,783.00	
" Surface Improvements:			
Surface Improvements	12,605.00		
Foundations	12,600.00		
		25,205.00	
" Agencies		4,267.00	
" Ore, Slimes, etc		21,782.00	
" New Power Plant		15,861.00	
" Supplies			
Supplies, etc., at Mine	19,872.00		
Furniture	2,877.00		
Saw Mill, Peña Blanca	1,205.00		
Main Mine & Mill Supplies	20,340.00		
General Mine Supplies	9,121.00		
General Mill Supplies	23,289.00		
Laboratory Supplies	2,402.00		
Tools and General Supplies	17,624.00		
Provisions and Clothing	5,488.00		
Tools in use Lower Works	2,424.00		
Furniture and Fixtures	6,013.00		
Medical Department	1,890.00		
Scrap Iron	503.00		
Brick Plant	29.00		
Supplies, Amapala and San Lorenzo	13,683.00		
Supplies, Despire	2,191.00		
" Tegucigalpa	2,722.00		
" in transit to Mine	5,515.00		
" Afloat	8,674.00		
" "	29,842.49		
		176,604.49	571,195.49
" Bullion and Concentrates:			
Not settled Production prior to November	153,000.00		
November Production	92,000.00		
		245,000.00	245,000.00
" Office Furniture in New York			1,230.00
" Notes Receivable			3,840.00
" New York City Bonds			50,875.00
" Cash:			
Petty Cash	99.66		
In Bank	4,861.32		
Drafts sold in Honduras	93,798.65		
On Hand in Honduras, October 1	29,978.40		
			128,738.03
" Sundry Debtor			5,000.00
" Zelaya Property			170,000.00
" Thermopilae Mine			3,360.00
" Honduras Transportation Outfit			9,943.39
" Laboratory Outfit			700.13
In Agents' hands, Suspense Account			800.00
			$2,690,681.95

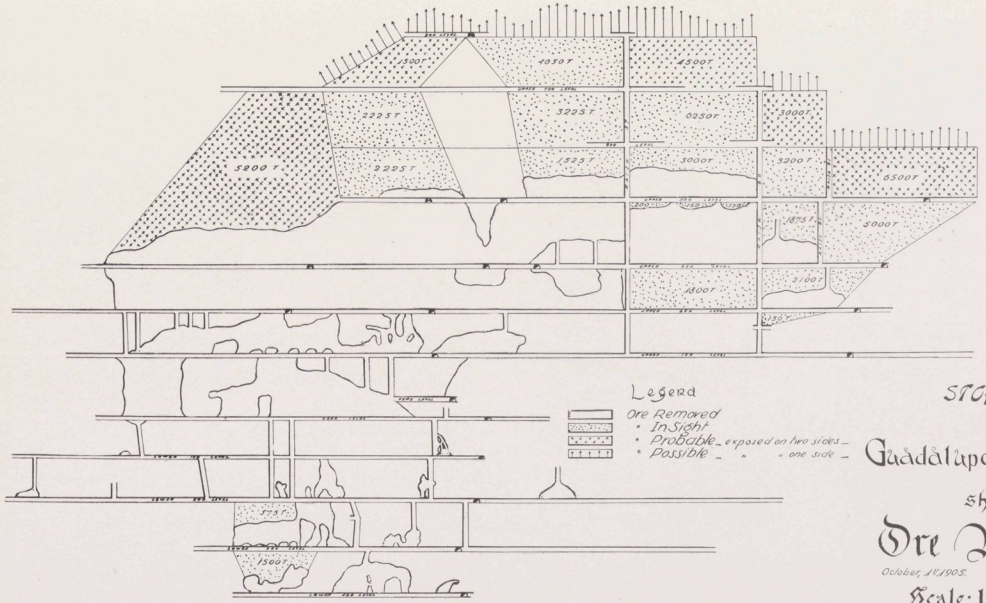
PROFIT AND LOSS ACCOUNT FOR YEAR

To General Supplies			$60,460.79
" Freight			9,490.38
" Legal Expense			65.00
" Dynamite			10,470.93
" Taxes			17.23
" Suspense Account			1,348.01
" Outlawed Accounts in Honduras			4,468.09
" Salary			11,063.96
" Honduras Examination			4,124.20
" Dividends			180,000.00
" Bullion Freight and Expense			20,187.53
" Insurances			3,820.19
" Postage			280.32
" Stationery			247.74
" Incidentals			2,800.00
" Quicksilver			30,662.45
" Expense, rents, etc			3,662.05
" Cables and Telegrams			442.08
" Interest			141.10
" Directors' Meeting			3,632.00
" Honduras Transportation Fares, etc			501.65
" Laboratory Salary			120.00
" *Expenses in Honduras as per Superintendent's Ledger:*			
Mine Development	26,984.55		
Assaying and Sampling	3,182.45		
Logs and Lumber	23,606.67		
Tegucigalpa Expense	2,800.77		
Mine Prospecting and Deadwork	27,792.17		
Charcoal	9,715.25		
Building and Repairs	4,480.87		
Lime	2,233.00		
Drainage	285.50		
Unclassified Labor	744.14		
Cord wood	5,683.59		
San Lorenzo Expense	2,341.43		
Salt	3,831.72		
Amapala Expense	1,404.10		
Agency Expense	7,718.19		
Concentrates	77,625.21		
Quicksilver	2,277.84		
General Supplies	772.11		
Taxes	3,703.35		
General Expense	75,563.58		
Mining	102,651.17		
Candles	2,048.20		
Freight (Inland)	74,231.34		
Mine Timbering	13,808.35		
Underground Repairs	8,609.86		
Live Stock	3,513.50		
Police, Soldiers and Watchmen	8,380.61		
Underground Tramming	4,471.10		
Electrical Haulage	4,319.07		
Crushing	5,736.02		
Profit and Loss	12,340.28		
Amalgamating	14,044.04		
Tramway	4,541.62		
Ore Sorting	7,379.79		
Power	1,633.45		
Light	1,583.43		
Telephone	1,008.24		
Road Maintenance and Repairs	7,256.40		
Ice Plant	534.25		
Crucero Group	10,314.55		
Pensions	918.22		
Pay Rolls	535,365.95		
Bodega	63,233.12		
Schools	589.58		
Property Improvement	1,579.48		
Cyaniding	1,138.37		
Inventory	16,927.59		
	1,191,993.07	Pesos equal to gold.	507,677.65
Balance, passed to surplus Account			127,690.24
			$993,065.39

ENDING NOVEMBER 30th, 1905.

By Bullion and Concentrates produced..... $993,065.30

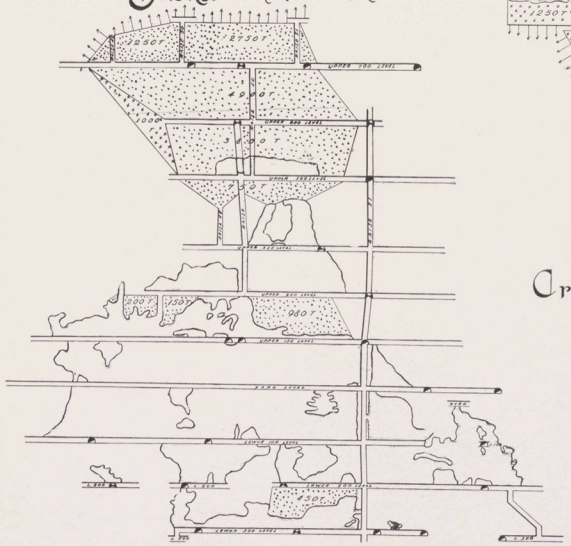
$993,065.39

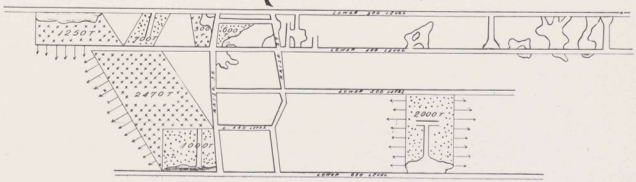


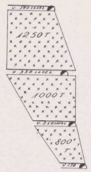
STOPE MAP of Guadalupe & West Vein showing Ore Reserves

October, 1905. H.J. Mitchell.

Scale: 1in. = 100ft.







Cross Vein
or
Catalina
Vein

STOPE MAP
showing
Ore Reserves
October 1st 1905. H.J. Weitel.
Scale: 1in. = 100ft.

Legend
- Ore Removed
- " In Sight
- " Probable _exposed on two sides_
- " Possible _ " " one side _

Stope Map
of the
Colonia Vein
showing
Ore Reserves
As estimated October 1st 1905

Drawn by Ernesto Mayenfeld

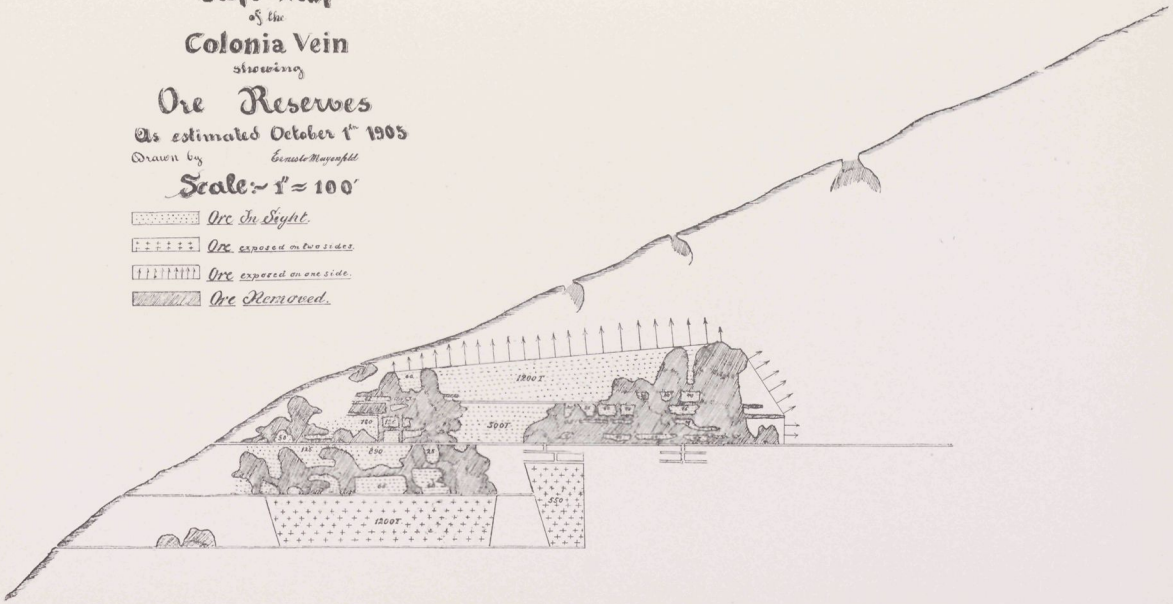
Scale:- 1" = 100'

Ore In Sight.

Ore exposed on two sides.

Ore exposed on one side.

Ore Removed.



REPORT

OF THE

NEW YORK & HONDURAS ROSARIO MINING COMPANY

NEW YORK, DECEMBER 1st, 1906

OFFICERS 1906-1907

W. S. Valentine, *President.*
H. G. B. Fisher, *Vice-President.*
S. Heidelsheimer, *2d Vice-Pres. & Treas.*
Ernest Schernikow, *Secretary.*

BOARD OF DIRECTORS 1906-1907

H. H. Babcock,
L. L. Clarke,
H. G. B. Fisher,
S. Heidelsheimer,
F. H. Parker,
Max ° Soto,
E. J. Swords,
W. S. Valentine,
P. R. Weiler.
N. Westheimer,

EXECUTIVE COMMITTEE 1906-1907

Forrest H. Parker, *Chairman.*
L. L. Clarke,
S. Heidelsheimer,
P. R. Weiler,
N. Westheimer.

REPORT OF THE

New York & Honduras Rosario Mining Company

New York, December 19, 1906.

To the Stockholders:

In presenting the report of the Company's business during the year past, we must apologize for the omission of many facts of interest, caused by the short time now at our disposal, as the President has just returned from a visit of examination to the mines; but in lieu thereof, we are pleased to place before you the reports of the several experts who accompanied him, as well as the Manager's and the Officers' report, all of which are replete with interesting information.

Unfortunately the extensive development work done during the year has not responded as bountifully as in the preceding year, which caused a draft on the reserve ore bodies, making a considerable reduction in the ore in sight; but this need cause no apprehension on part of the Stockholders, it being a temporary condition, as the development on the new ore chutes now in progress is laying bare much more ore than our monthly consumption, and we feel that within a short time our reserve ore will again be up to its standard.

During the early part of the year our works were still affected by the drouth and shortage of food supplies, as in the previous year, and we were compelled to again ship large quantities of corn, beans, etc., from this port, as well as from San Francisco; this improved in the latter part of the year, the native crops were good and shipments were discontinued.

The severe storms which raged in the Southern countries during October last affected Honduras to a considerable extent, causing very heavy financial losses throughout the country as also many deaths. The beautiful cart road between the coast and Tegucigalpa, which the Government had recently completed, was severely damaged, bridges washed away and in some places caused loss of life. Fortunately for our Company, our location was not within the line of most severe damage, and whilst our loss has been heavy, we can congratulate ourselves on its being limited to such parts of our works as allowed of immediate repairs and caused very little stoppage of production.

RESERVE.

We have increased our cash reserve over last year, it standing at the time of closure of the books at $294,987.00. *During the year passed we have declared and paid* 19% *dividends on our Capital Stock, amounting to* $285,000.00.

IMPROVEMENTS.

The improvements begun during the last year have been concluded and others begun. Our electric power plant has been completed and now transmits power to all branches of our works. A large storage battery has been erected at the mouth of the 650-*foot level, which, taking its power from the main line, drives the locomotive in the mine and the arc lights at and around the same.*

The Cyanide Plant and Pebble Tube Slimer were completed and have proven a success.

The Pipe Line erected from the Rosario tunnel direct to the Cyanide plant has been a source of large profit to us, as it carries the slime water from the mine to this plant, where it is

worked to a good profit. This water has been heretofore wasted and allowed to run down the stream.

THE MILL.

The Mill has been kept up in such good condition that the loss of time attributable to mechanical work has been very small.

We have still labored under the antiquated and expensive method of Pan Amalgamation. Our work in the Cyanide mill has been so satisfactory that this method has suggested itself for use on our entire output of ore, and experiments have been made, which satisfy us that this modern system of metallurgy will very soon substitute the Amalgamation. It is further suggested that the new Cyanide Plant be erected in the vicinity of the mouth of our main tunnel, thus saving the heavy transportation and other expenses entailed in carrying the ore to the present mill.

STANDING.

Our high standing with the Government of Honduras has been maintained and its co-operation and assistance is ever at our command. Our financial standing is fully as high as in former years.

A few questions of right to lands within our property have arisen, but all of these, except one, have been equitably settled without suits. This latter one is now in process of law and we anticipate an early decision in our favor.

In submitting the above facts, we again call attention to the attached reports, which go fully into detail on all branches of our business.

Cable advice from the Manager received subsequent to the writing of accompanying reports show that the two important ore chutes, therein referred to, continue in strength and value, thus

giving us every encouragement to expect an early and rapid building up of our ore reserves. With this in view we feel assured that the coming year will be even more profitable than the passed one.

Respectfully submitted,

W. S. VALENTINE,
President.

To the President and Board of Directors,

New York & Honduras Rosario Mining Company,

42 Broadway, New York City.

DEAR SIRS:—

In transmitting to you the following report on the properties operated by this Company, a large fund of preliminary information, with which you are already thoroughly acquainted, will be entirely eliminated and your attention is at once called to the salient conditions now existing at the property and to the important recommendations necessary thereat.

ORE RESERVES.

This is the most important condition in the mine at the present time and demands your especial attention. The greater portion of time was spent in arriving at these results and at the same time a general examination of the mine was made with a view to the future development of the property, a consideration which is next in importance, if not fully so, to the ore reserves.

Mining operations for past years have been carried on along four veins—the Rosario, Northwest, Buena Ventura and Guadalupe. Some years past the known ore-bearing ground in the Rosario Vein was exhausted and for the past few years ore-winning has been confined to the other three veins.

In order to make the following estimates, the mine was thoroughly sampled, the detailed results of which are placed before you in the Appendix of this report, together with the seven maps which accompany it.

The Appendix gives the number of each sample taken, its width in feet, number of ounces gold and number of ounces silver per ton contained in each, its value in each of these metals, and lastly, the total gross value of the sample. The values are all in gold coin and figured on a basis of $20.67 per ounce for gold and $0.68 per ounce for the silver contents. This is done merely for convenience, but the gross values of all ore reserves are given in silver Pesos at an exchange rate of $2.10 which now exists in Honduras. The amounts throughout the report are also in Pesos and the gross figure, assumed as the limit of pay ore on page 23, is taken at $45.00 per ton.

The maps accompanying the report, under separate roll, show the location of each sample, represented by the figures 1 to 661, and the shaded portions give the extent of the ore mined. Their accuracy is vouched for only in so far as the sampling is concerned. The locations of the ore reserves are shown by the different "Blocks" in black letters.

The ore total reserves now in the mine are distributed in the three main veins, also in the new east North vein, recently found and now known as the Socorro vein.

Blocks.	Average Width in Feet.	No. Tons.	Value per Ton.	Total Value.	Vein Located.
Total.....	1.0	7,101	$ 85.75	$608,941.92	
14.....	0.6	70	206.03	14,422.10	Catalina
15.....	2.0	3,000	88.00	264,000.00	Socorro

It is quite probable that the above 7,101 tons will be increased 10% to 15% and its gross value lowered, from the fact that the above estimates are based on the pure vein, while a certain amount of waste will be taken with the ore as it is mined in the stopes. The gross value recovered will also be reduced

another 20% on account of losses in milling, as noted on page 23.

It is also very certain that this tonnage in the three main veins can be increased to the extent of 1,000 to 1,500 tons by extracting ore left in out of the way corners, which cannot be estimated.

By way of explanation, it may be said that the ores of the Catalina and Socorro veins are treated apart from the others in that they are slightly different in character.

In passing it may be stated that the ore on the Northwest vein is practically exhausted and there has been none developed above the Upper 500-foot level. In the lower levels, 400 to 650, the vein is still good, but unproductive.

Exactly the same remarks apply to the Buena Ventura vein and no ore has been developed above the highest level shown on the maps. At and below the Lower 400-foot level this vein has nearly disappeared; it either pinches out or merges into the Northwest vein at this depth.

As shown on the maps, the ore now available in the Guadalupe vein is scattered in many places and is really the cleaning up of the large ore shoot which has kept the property producing for the past three or four years, the extent of which is indicated by the shaded area.

The daily assay books, as kept by the mine, were examined in order to find if any ground had been omitted in the sampling of the mine, which might have contained profitable ore, but the results were negative.

Samples 500 to 644, inclusive, were taken in the Colonia vein, and by referring to them in the Appendix table and inspecting the map of the Colonia workings it can be understood how difficult it is to estimate any known quantity of ore reserves in that property. The values in the vein are high, but they are erratic and show the ore to be spotty and to occur in bunches. In many

places the ore is too low-grade to mine and in others it is very rich, but too narrow to be profitable.

Unquestionably, several thousand tons of profitable ore can be mined from the Colonia vein as it now stands, but it is impossible to state any definite quantity or value for it.

IMMEDIATE DEVELOPMENT.

Under this heading will be considered the urgent work now demanded in order to bring under development new ore bodies.

The mine has not a long life, considering the present ore reserves, therefore it is advisable to curtail as much expense as possible, cease any questionable prospecting work and push development where it is most likely to bring quick results in finding new ore bodies.

In the eastern portion of the workings on the Guadalupe vein, a new vein has been found, which has a northerly course from the former. This vein is shown on the Guadalupe map by crosscuts on the Upper 700, 600 and 500-foot levels and is now known as the Socorro vein. At the present writing there are practically 3,000 tons of ore opened on this vein and the headings show an average width of 4.2 feet, an unusually good width for this mine. If this vein continues at the present width and value of ore the rapid development of these headings will expose profitable ore rapidly.

The Socorro vein is also known to exist on the Upper 350-foot level, where it should be opened at once and worked to the north, thus making four headings on the Socorro vein. This new vein is the most promising place in the property for quick development and so far it promises to give quick returns of new ore.

The next location of importance for the quick development

of ore lies in the east headings of the Guadalupe vein on the Upper 500 and 350-foot levels. At present these two headings show a good width of good ore and indicate that further work to the east might disclose a new ore shoot.

Another favorable showing for new ore is on the vein cut in the Upper 900-foot cross-cut and running south. Samples 184 to 200, inclusive, were taken here and they show good ore for a distance of 150 feet. A small tonnage can be expected from here, but as the vein is only known on this level, no definite quantity can be estimated as developed. It is advisable to push work on this level in all directions.

The indications in the Socorro and east Guadalupe veins are extremely favorable and should the present widths and values continue for several hundred feet, new ore would be rapidly developed and in excess of the present output.

There are a few other places where immediate development should be carried on at the same time as the above-mentioned work. It is not a wise plan to depend upon one portion of the mine to produce future ore, as experienced in the past two years, for if that particular locality is non-productive it leaves the property in bad condition so far as ore reserves are concerned.

It would be well to continue the drift to the south on the Catalina vein; not so much for what might be found in the Catalina itself, but it will serve as a long cross-cut for that country to the south of the Guadalupe vein and it might cut a parallel east and west fissure.

Another desirable piece of work to continue is the cross-cut toward the Colonia workings from the lower 300-foot level, although this nears the lower limit of good ore. This cross-cut would be cutting new country and at the same time, when completed, would afford an outlet for Colonia ore, also for the timber that is cut on that side of the mountain.

It would be well to examine the old Rosario workings for stringers going off into the walls or for cross veins. Should any of them show well upon a little prospecting, continue the work for some distance.

It is also advisable to continue development along the vein on the other side of Rosario Mountain, in the Quebrada Honda creek. Whether this is a possible extension of the Guadalupe vein to the west is impossible to say, but it is good prospecting ground and should be opened from that side and not from the west headings of the Guadalupe.

A heavy cost per ton shows on the books for development work, but in a mine such as the one in hand, where the vein averages a foot or a little more, an enormous amount of such work is necessary. During the past year, 10,172 feet of development work was done. Few large mines of the world do more than this, or even as much, but the most of them have veins from 4 to 100 feet in width, consequently the development work necessary for a mine having a vein only one foot in width, can be appreciated.

That ore reserves were not increased in the past eighteen months was not due to the lack of development work, but the mine did not respond to that work as was hoped. At that time the large ore shoot in the western end of the Guadalupe vein was being opened and fine ore showed in all the headings. Upon advancing these headings the ore shoot was run through and the workings were rapidly pushed ahead, hoping they would encounter another shoot to the west, but to no avail. This was the natural direction to drive, especially as the east headings and drifts on the Guadalupe were in bad repair and not easily accessible, and no favorable indications were known elsewhere in the mine. The development work was concentrated in the west and

at the end of a year's time a large amount of it had been done with no results, thus showing the disadvantage of concentrating such work in this particular mine.

FUTURE DEVELOPMENT.

The remarks under this heading are not made for prompt action, but demand your consideration for the economical expenditure of the funds devoted to the future development of the property, and before any recommendations be made along such lines it is necessary to consider, for a moment, the geological conditions.

Rosario Mountain, in which the mine is located, has an elevation of about 7,200 feet and is the highest in the vicinity. The formation is a volcanic rock, termed Andesite by some, but its exact classification is immaterial, except that it is one of the Porphyries and very susceptible to disintegration. This Porphyry covers the entire hill and no change is found until the Rosario Tunnel is reached.

The climate of Honduras is very mild, attended by heavy rains the entire year, consequently it is a region of deep disintegration, weathering and leaching of the rocks, and the surface is constantly on the move through the natural agencies of transportation. The former effects can be seen in the veins as deep as the Lower 100 and the 200-foot levels of the mine, while the latter can be appreciated after each rain.

Any veins existing in the mountain would be subjected to the same phenomena and the following description has plainly been the history of the Rosario veins. The original veins have been weathered and leached by descending waters and the values have been carried in solution, redeposited at a lower depth, until the mine now is a typical example of the three-zone theory of ore

deposition; that is to say, the first zone extends from the surface down to about 400 or 500 feet and contains no values, they having been leached away. This top zone is not as well exemplified along the Rosario vein as in the others, especially on the eastern end of it, for here transportation has kept pace with erosion, so that the oxidized or leached zone has been eroded, bringing the second zone at or near the present surface.

The second zone is the important one and is known as the enriched zone of the three. A brief description of the occurrence of the good ore bodies in all the four veins will show still better the importance of this zone. The best ore in the Rosario extended from the Upper 100-foot level down to the lower 100. In the Northwest vein it was found from the Upper 150-foot level down to the Lower 300; and it is here noted that the enriched zone extended lower than that of the Rosario. The good ore bodies along the Buena Ventura vein reached from the Upper 700-foot level down to the Upper 500, and there were also good bodies from the Upper 150 to the Lower 100-foot level with interlocking ore shoots from the bodies above. Along the Guadalupe vein and in its easterly portion the good ore extended from the Upper 350-foot level to the Lower 200 level, while to the west the best ore ranged from the Upper 600 to the Upper 250-foot levels.

In each case some ore was found above the enriched zones described, but it was scattered and lower grade, till it blended off into the barren top zone. The same may be said of the ore found below the enriched zone, where the third zone is encountered. This last zone is the original one, or as the vein exists in its original state, which has not been oxidized or enriched and its original ore contents are not rich enough to be profitable. The good ore bodies of the enriched zone gradually finger down into the barren or poor third zone below.

It is plain that the ore bodies found in the property are the results of the geological conditions described, and they follow, in a general way, the contour of the hill, their description having been followed from the outside toward the crest of the mountain.

The above geological facts have been dealt with in considerable detail, but with the end in view of plainly showing the region of profitable ore occurrences; and to further show the improbability of finding valuable ore in the lower levels of the property, consequently it is not considered advisable to spend money prospecting in the Rosario Tunnel.

The above theory has been absolutely proved by the actual development work already done and substantiating this, witness the results of this work from the Rosario Tunnel up to the Lower 300-foot level. To say that no ore will be found in this territory would be wrong, as some has already been encountered, but the bodies are scattered and small and by no means have they paid for the work done. In fact the Rosario east drift on the Guadalupe vein should be discontinued, as recent assays from there are very poor, and all development work in this lower ground should be stopped and the money spent in the upper levels of the mine.

OUTSIDE VEINS.

A number of veins exist to the north, such as the San Vicente, San Miguel, Concepcion and others, but an examination of them indicates that they are of minor importance and it is not advisable for the Company to explore them on its own account. A very good and feasible plan would be to lease any and all such veins, many of which have produced ore, to reliable miners on a reasonable schedule at a fixed price per ton for certain grades of ore. In this way undoubtedly a quantity of ore will be brought

to the mill which otherwise would never be mined and such a system might open a valuable mine.

As mentioned before, the formation of Rosario Mountain changes about the mouth of the Rosario Tunnel to slates of sedimentary origin. The Rosario vein is known to continue down into these slates, as is plainly shown in the Lower 750 and 850-foot levels, but the probability of finding ore in this formation is very remote and there is no encouragement for prospecting.

MINING METHODS.

Owing to the narrowness of the vein, its softness and the softness of the enclosing walls, the ore is mined by the filled stope method. One wall of the vein is first broken and allowed to fill the stope to within five feet of the roof, then the ore is broken down and shoveled into chutes, which drop it to the level below, through which it is trammed out of the mine. There is an excess of dirt for filling which has to be trammed out as waste.

In the lower levels of the mine the ore and walls are somewhat harder and the open stope method can be used. Under the latter conditions the stopes can be left as open excavations with a few timbers remaining, which have served as platforms for the miners. However, the open stope is the rare exception and the former method is the prevalent system.

All stoping is done by day pay men and in such a narrow and soft vein the work could not be done by contractors, as they would mine ore and waste together and the grade would be below pay.

Such a mining system is the practical and economical way where the veins are narrow and the walls soft. It saves the use of timber, which is an expensive supply at San Juancito, and

wins the ore as clean as possible. The only timber required under this system is enough to crib the chutes and ladder ways in the stopes, and lagging and posts enough to keep the main drifts open as the mine is developed, which amounts to quite an item when one considers the amount of development work per annum.

The stopes have to be carried from 2.5 to 3.0 feet in width, which makes it necessary to break 2.5 to 3 times more ground than vein matter, all of which adds to the cost of mining one ton of ore. However, under the conditions the present mining methods are the most practical and economical that can be used.

MINING COSTS.

The total mining costs in the following table are for the financial year from October 1, 1905, to October 1, 1906, and based on 31,451 dry tons of ore crushed and milled.

	Cost Labor.	Labor per Ton.	Cost Supplies.	Supplies per Ton.	Total Cost.	Total per Ton.
Total....	$536,734.12	$17.07	$141,071.72	$4.48	$677,805.84	$21.55

This table makes the actual ton cost for mining, $21.55, which is not unreasonable, considering the wages prevalent at San Juancito, which are discussed on page 23.

The heavy items are Development, Mining, and Timbering, and from what has been said on previous pages it can readily be understood why these costs reach such a figure.

Tramming is also high, but the distances are long, are becoming longer and the grades are bad in many places.

The Electric Haulage item is larger than it should be and this cost might be improved by straightening and improving the grades in the Rosario Tunnel, whence all ores come to the surface.

The item of General Expense is too high and undoubtedly it could be reduced by distributing it among the other costs. In fact no mine should have a General Expense account of more than a few cents per ton.

There is no radical change of system or mining method which can reduce the mining costs to any large extent, yet they might be appreciably lowered by putting into effect the recommendations to follow.

WORK AND SUPPLIES.

In addition to the stoping of ore by day pay men, raises and cross-cuts and drifts were driven by contract to the extent of 11,662.5 feet at the following costs:

	Feet Driven.	Average Cost per Foot.	Average Cost per Ton.	Total Cost.
Drifts	8,068.	$18.78	$4.81	$151,527.50
Raises	1,232.5	18.58	0.72	22,900.00
Cross-cuts	872.	18.98	0.52	16,555.75
Stope Raises	1,490.	1.45	0.06	2,163.25

	Dynamite.	Fuse.	Caps.	Candles
Supplies per Foot Driven	2.71 Lbs.	14.14 Feet	6.74	1.21 Lbs.

Days pay men on stoping receive $3.00 per shift and drill 6.54 feet per day, averaging 3.75 holes at 1.75 feet deep, costing $0.45 per foot drilled.

The total consumption of supplies was:

	Total.	Per Hole Contractor.	Per Hole Company.
Dynamite	95,354 Lbs.	0.402	0.28
Fuse	728,970 Feet	2.09	3.01
Caps	307,605	1.0	1.0
Candles	64,280 Lbs.		
Lagging	48,667 Pieces		
Round Timbers	14,703 "		
Lumber	No Account		

The above figures appear reasonable under the existing conditions and wages.

TRAMWAY.

The mined ore is trammed out to the mouth of the Rosario Tunnel, where it is sorted, crushed and delivered to an aerial, gravity tramway of the Haliday type, and transported to the mill at San Juancito, a distance of 6,600 feet. This is a poor system of tramway and the sorting, crushing and transporting of the ore amounts to the large sum of $1.62 per ton for the year. This system could be improved and cheapened by the installation of a four-rope tramway, such as the Bleichert.

If the Cyanide experiments, recommended on page 20, work out a treatment of the ore, then this tramming can be entirely abandoned, with a saving of the above figure.

MILLING AND ITS COSTS.

The present system of ore treatment is to pass the ore to stamps and lead the crushed material to sizers and then on to Wilfley concentrating tables. Concentrates are made, averaging between $900 and $1,000 per ton at the ratio of 20 tons of ore to one ton of concentrates. These are shipped to New York for smelting.

One-third of the sands from the tables are put through a tube mill for fine grinding and the fine material is then sent through amalgamating pans and the residues are turned into the creek. The other two-thirds of the table tailings are settled in tanks and the coarser sands are returned to the amalgamating pans and treated like the tube mill product, while the fines or slimes are run over canvas and burlap tables to catch any remaining concentrates, and a certain percentage of the slimes passing these latter tables are treated in the cyanide plant, the rest going to waste in the creek; this percentage amounts to about 8% of the total ore crushed in the stamps.

It is not necessary to go into further details as to the treatment of the ore, except to mention the important facts that the value of the ore treated the past year was $98.88 per ton and the gross saving for the same period was 80.4%. These figures mean that the mill loses $19.39 out of the total value on every ton milled, which is a heavy loss and should be carefully considered as to future methods.

The month of September is taken as a typical month for the consideration of the milling costs, which appear as follows:

	Cost Labor.	Cost Supplies.	Total Cost.
Totals.....	$7,059.21	$23,348.42	$30,407.63

The above figures place the average cost per ton for the month at $11.85, but the totals for the year reduce it to $10.94 per ton.

The above data and examination of the milling plant draw the following comments: The pan amalgamation system is an obsolete process in metallurgy. It not only is expensive, but is open to avenues of waste which cannot be effectually closed. The present mill is more or less of a trap, combining concentration, pan amalgamation and partial cyaniding, resulting in heavy losses and high costs, which can not be materially reduced, except where direct losses of product can be avoided.

It is earnestly recommended that an exhaustive and systematic series of experiments be made on the ores with the view of treating them by the cyanide method. These experiments should be done at once, for it is fully believed that such a process can be adapted, and if so, the costs would be greatly reduced, even if the present extraction is not increased.

Should the cyaniding of the ores prove successful, another saving in costs could be made by erecting a new cyanide plant at the mouth of the Rosario Tunnel, thus cutting off the heavy

head-house and tramway costs. This is the logical place for the mill, especially as the power, necessary for its operation, is easily transmitted from the present power plant.

Next in importance to the rapid development of the mine for ore reserves, is this question of cyaniding and constructing a new mill above, and it is the only department wherein a handsome saving can be made in the future operation of the property.

PLANTEL DEPARTMENT.

Under this heading have been placed many accounts that were not considered directly chargeable to either mining or milling and in order to show the character of these items they are tabulated below for the month of September.

	Labor.	Supplies.
Totals.....	$15,770.36	$2,482.91

This figures a cost for this department, for the month of September, of $5.80 per ton, but the gross figures for the year bring it up to $7.07. This is an exceedingly large cost outside of mining and milling operations and the account seems to be a sewer for all charges not easily distributed. It is believed that many of these charges could be re-distributed to their proper accounts in mining and milling, and it may also be that a stricter watch on this department can result in economy. For instance, there is a stable account which amounts to nearly $1,700 per month, and in this item are noted 28 saddle mules kept on hand by the Company. This number seems abnormal and six would seem sufficient if the time for their usage was economically planned among the staff.

The item of traction can be materially reduced. It costs $50.

to $54. Pesos per ton to freight supplies from San Lorenzo to San Juancito by mule, but the Company installed automobiles to carry this freight. As often happens, the ideal results have not materialized from their use, as detailed figures show that since April, the time they were installed, these machines show a net loss of $4,355.34 to the Company; that is, the freight hauled by them cost that amount over and above what the same tonnage would have cost by mule.

Considerable economy could be effected in this department if more attention were paid to it. Many of the extravagancies are mere habit, while actual losses have occurred in several ways.

FREIGHT ON PRODUCT.

This item is treated separately only because it is so done in the Company's accounts. It consists of freight on concentrates and bullion and cost, per ton of ore milled last year, $3.33. This work was done by automobile from April to the present time, and if the detailed figures were available they would show a further loss for the traction machines.

RECAPITULATION OF COSTS.

The total cost per ton for the year, based upon 31,451 tons crushed, is distributed as follows:

Accounts.	Labor.	Per Ton.	Supplies.	Per Ton.	Total Per Ton.
Milling	97,833.39	3.11	246,453.38	7.83	10.94
Mining	$536,734.12	$17.07	$141,071.72	$4.48	$21.55
Tramway	35,776.68	1.13	15,230.42	0.49	1.62
Plantel	198,607.03	6.31	23,823.52	0.76	7.07
F'g't Product....					3.33
Total					$44.51

Consequently in figuring the ore reserves at the beginning of the report the minimum value of $45 per ton was used.

OTHER RECOMMENDATIONS.

Wages.

In several places the costs have been considered reasonable, considering the wages prevailing at San Juancito. The average wage for the miner is $3 per day and all other labor is proportionately high. Some years ago the Company began raising wages and they have remained high ever since. The time has come when it would be advisable, if not necessary, to reduce the wages of the camp.

Labor at San Juancito receives double the price paid elsewhere in Honduras, Central America or Mexico. In fact, the same miners will work at mines but 20 miles from Rosario for half what they receive at the latter place. This is an anomalous condition of wages and it is recommended that the Company begin reducing them at Rosario immediately.

A reduction will work no hardships on the people, as living conditions will adjust themselves and the miner will have just as much money left at the end of the month as he has now, which is usually nothing, anyway.

Miners should be encouraged to live on the hill near the entrances of the main tunnels, and eliminate, as far as possible, the two and three-mile walk and a 2,000-foot climb twice a day to and from San Juancito. It would be to the Company's interest to bring this about, even if it had to build the houses and charge them only a nominal rent, for more work could be gotten from the men. At present they do half a shift's work is going to and from their homes.

Mining Methods.

The methods of mining and the work carried on are approved and no rigid changes or improvements can be advised, yet the general conditions might be bettered and the costs somewhat

cheapened by carrying out the following recommendations.

The mine surveys and maps are very much behind, and it is urged that they be brought up to date, absolutely correct in every detail.

Correct stope maps should be kept and brought up to date every month, with lines showing the amount of stoping done in each stope every thirty days. Also correct assay maps should be kept a-pace with the work, which should show at a glance the value of any ore in the mine. Enough work is done at present to keep these matters up, but the results are thrown into a book and are of no value as a record. All the above should be in the hands of a competent surveyor, and with the assistants now employed, the work could be carried out; it only lacks systematic recording.

A new drafting office is needed at the mine and should be built at once. At present it adjoins the time and bookkeeper's room, and besides a drafting office, it is a receptacle for all the dirty mining clothes and boots, and every jar is noticed on the drafting tables. Good work cannot be done there, and a new one is needed immediately, apart from any other building, where the maps can be made and systematically filed.

A better system of keeping track of supplies and cost-keeping is necessary at the mine, and with this end in view, there should be a "Work Order Number" method introduced. Each heading, stope and other work in the mine should have a number and when any one in authority sends a requisition slip to the store-house for supplies, that slip should contain the number of the work to which these supplies are chargeable. Also, at each day's close, the time slips of the shift bosses should have the work order number after each man's name. By this method, at the end of each month, the Manager and Superintendent will know

just the amount each piece of work in the mine is costing, an essential knowledge to good mining. This same system could readily be extended to the mill and other operations.

Imported Labor.

Several attempts have been made by the Company to import foreign labor to work the mines. It has proved to be a loss financially, and it is well known that natives and imported labor will not mix and the latter soon becomes disgruntled. There is plenty of native labor, and it should be used in every line possible and as high in the order of work as can be done economically.

Machinery.

Should the old mill be abandoned there would be an excess of power in the power plant, and it would be advisable to install another, or better still, a new air compressor with a capacity double the present machine. In a mine where such a large amount of development work is imperative, machine drilling is much faster than hand work.

Respectfully submitted,

(Signed) F. H. MINARD.

San Juancito, Honduras, C. A., Nov. 24, 1906.

NOTE.—The Maps and Tables referred to in this Report are on file in the office of the Company.

San Juancito, Honduras, C. A., Nov. 15, 1906.

To the President of the New York
& Honduras Rosario Mining Company.

DEAR SIR:—

Herewith I submit my report upon the administration costs and conditions of the metallurgical work and mining as now carried out in your property, and to suggest such methods of improvement which will tend towards lowering of costs.

In doing so I wish to acknowledge with thanks the assistance given me by the General Manager and his staff.

In some places I have taken the month of September last as an instance of cost, and in others I have referred to the past financial year. All figures of value are in Pesos.

THE MILL.

It is here proposed to take September as a typical month. It ran 29 7-12 days and crushed 2,564 tons.

This works out at 1.92 tons per stamp per day.

Expenses incurred were:

For Labor	$ 7,059.21
For Supplies	$23,348.42
Total	$30,407.63

Which were thus divided:

	Labor.	Supplies.
Assaying and Sampling	$ 522.69	$ 1,560.55
Building and Repairs	.....	2,648.05
Crushing	576.07	387.22
Concentrating	1,107.88	2,899 81
Amalgamating	2,240.37	13,656.11
Cyandiding	1,089.74	1,863.27
General Expense	1,522.46	333.41
	$7,059.21	$23,348.42

Total Cost:

Assaying and Sampling	$ 2,083.24
Building and Repairs	2,648.05
Crushing	963.29
Concentrating	4,007.69
Amalgamating	15,896.48
Cyaniding	2,953.01
General Expense	1,855.87
	$30,407.63
At per ton crushed—Labor	$ 2.75
At per ton crushed—Supplies	9.10
Total	$11.85

An Analysis of each item follows:

ASSAYING AND SAMPLING.

The amount charged, $2,083.24, is the proportion of total expense of the Assay Department properly chargeable to Milling. This department is composed of 2 Assayers, 2 Assistants, and 10 native Helpers, who were paid in September, $1,213.63. The supplies amounted to $1,721.35.

The Dept. made	97	Assays from	Cyanide Works.
	540	" "	Concentrates.
	830	" "	Mine.
	430	" "	Mill.
	120	" "	Crushing Plant.
Total,	2,017	Assays.	

And in addition to above made 36 Bars of Bullion.

The cost per Assay of $1.03 is remarkably low, when the cost of chemicals and fuel is considered, but as the same staff might have made 500 assays more, it is possible that one assistant might be dispensed with.

A small loss in mercury during the retorting takes place, due to

driving it off more rapidly than it condenses, and this can be greatly avoided by more care in regulating heats, and in the provision of an additional condenser and traps.

The Balances require better isolation from the building, as vibration of Mill affects them, and weighing results may be impaired.

BUILDING AND REPAIRS.

At a cost of $2,648.05 for supplies was an unusual one, being cost of new Drier for Concentrates. This item might have been distributed over twelve months, instead of being charged off in one month. Its cost raised the Mill costs $1.03 per ton.

CRUSHING.

Amounted to $522.69 for labor, and $387.22 for supplies. Part of the labor costs amounting to about $19.00 per day, are not shown in monthly sheets under this head, but appear under "General Expense" (see remarks under heading of General Expense). The item of $19.00 is, however, as small as it can be made under the conditions of the Mill. The same men could just as easily have crushed double the quantity with a larger Mill. On the supply costs, little also can be said, beyond pointing out that the breaking of cam-shafts is an expensive item. About three are broken every month, and this might be either avoided, if the stem guide blocks were relined, or substituted by new ones of hard wood, or by raising the feed of the batteries. About 8 shoes are used per month to 25 dies. It will pay to buy a higher grade of die at an increased cost of 12%. With this grade of ore, one shoe should wear out two dies.

CONCENTRATION.

This cost $1,107.88 for labor and $2,899.81 for supplies. The total cost for labor amounts to $39.00 per day, and is the mini-

mum for which the work can be done. But same costs would produce more, were the plant larger. The supplies are thus analyzed:

Lumber	$ 486.92
Wood	916.66
Sacks	1,222.45
Hose, oil, and pettus	273.78
	$2,899.81

The item of $486.92 for lumber was for new drier house, and is unusual, but it might have been written off in 12 months. The wood will be discussed later on. $1,222.45 for sacks is made up of issue of new sacks and freight from New York upon old ones, as they are returned. The item of $273.78 needs no remarks.

The total cost of concentration, $1.60 per ton crushed, might be very materially reduced by cyaniding the concentrates here, and shipping only the Precipitates of the Cyanide Process.

AMALGAMATION.

Cost $1,089.74 for labor, and $13,656.11 for supplies. The labor employed on pans amounts to $31.00 per day, and for the boiler $5.50. An item of labor of $19.00 per day is used for chargers and wheelers and the total cost of labor is $74.00 per day.

Supplies are thus accounted for:

Pan Castings	1,081.40
Hose and Petties	129.84
Nuts and Piping, etc	53.24
Wood	1,833.34
Salt and Chemicals	10,499.51
Cement	53.78
	$13,651.11

These items need no special discussion here. The loss of mercury has been greatly reduced, and now stands at about two lbs. per ton. The whole expense is necessary to the process, and cannot be, therefore, reduced. It is the process itself which requires abolition with all its costs, and the Cyanide Process substituted if found practicable and profitable. The recent addition of the Tube-Mill, however, merits notice here, for it has resulted in raising the total extraction 7%. (Concentrates 2%, Amalgamation 5%). Its cost and running amounts to $0.37 per ton passed through it, and it has increased extraction for the month of September by $5,648.00. As its capacity is only one-third that of the Mill, it is evident that two more should be ordered at once.

The care of Quicksilver and Amalgam is well provided for, and the possibilities of thefts reduced to a minimum.

The present cost of the process of amalgamation is about $6.20 per ton crushed.

CYANIDING.

Every effort has always been made to recover values as far as possible, and until the practical use of Cyanide was proved, it was impossible to do more than was done. The present Cyanide Plant was put in as an experimental basis, and began its operation last April. It was designed to treat the residues (after Concentration) which had been settled in pits, and these residues returned in part to pans, and in parts (consisting mainly of slimes) to the Cyanide works.

Only about 8% of the tonnage crushed can be treated in present plant for want of capacity, and about 8% more of the same product is still going to waste. That is to say, about 16% of the Mill product which could not be treated by any other process except Cyanide, has always been wasted, and now one-half of this is caught and treated by cyanide at a profit. As

the recovery made by the process is 7,820.47 ounces Arg. and 25.54 ounces Au. for the month of September at a cost of $1,089.74 for labor and $1,863.27 for supplies, it becomes evident, that the Cyanide Plant requires duplication to treat the remaining product of equal value, now of necessity being wasted. But other considerations, such as the Cyandiding of the whole mill product, necessarily postpone a decision to increase present cyanide plant upon present methods. At present the percentage of extraction of the tonnage actually treated by Cyanide stands at 77.9% for silver and 91.% for gold, which I consider a very favorable indication of what can be done with a more adequate and better arranged Cyanide Plant. The present consumption of Cyanide is very high, being a mechanical one, due to the inadequate settlement of the slimes, and the necessity of wasting the weak solutions. These would be used for sand treatment, if all the product was being cyanided, and the loss practically eliminated. Again, if present plant was large enough, much of this loss could be prevented by allowing longer time for better settling.

The foundations of present tank require attention, or leaks may occur and solutions be lost.

A floor of concrete is required under extraction boxes to prevent waste of very valuable products, now liable to loss.

A drier for Cyanide Precipitates is necessary, and should be built at present works, and avoid thereby possible loss by present methods of handling and drying. The handling of waste slimes from press to dump can be slightly improved by putting in a flume and head of water, or by car and track. With these exceptions present costs could be materially reduced.

An experiment on a working scale should be now undertaken to determine practical value of the Cyanide Process to treat the whole product of the Mill. One to determine extractions on the Concentrates, another to determine possible extraction on product

of Tube-Mill as a whole, and two more to prove possible extractions of slimes and sands separately, as coming from Tube-Mill. No estimate of the applied value of Cyanide can be made, until this data is had.

GENERAL EXPENSE.

This item of the distributed costs amounting to $1,522.46 for labor, and $333.41 for supplies, embraces the salaries and wages of men employed on the Mill and the processes connected with it.

These items require distribution over Amalgamation, Concentrating, Crushing, and Cyaniding; and this item will be reduced to a small figure, which may be legitimate as a "General Expense."

This completes a superficial analysis of the working costs of Mill for month of September, 1906, and it is now proposed to go further into detail of what may be called the purchases and use of local supplies.

THE MINE.

On a basis of 31,451 tons delivered to Mill and crushed, I find that for the past financial year the cost per ton has been at the Mine, $21.55. The following table shows this divided up into Labor and Supplies, and the cost of each per ton worked out.

MINE COSTS FOR THE PAST FINANCIAL YEAR ON BASIS OF 31,451 TONS CRUSHED.

Labor		Supplies			Total
Labor.	Per Ton.	Supplies.	Per Ton.	Total.	Per Ton.
$536,734.12	$17.07	$141,071.72	$4.48	$677,805.84	$21.473

Actual total per ton crushed, $21.55

NOTE.—Run-outs at per ton are taken to nearest place of decimals and are only approximate.

At a glance it can be seen which are the principal items of expense.

The item of "General Expense" is entirely too large to be treated as such. It consists of the expense of Superintendence, Engineering, Clerks, Storekeepers and Watchmen. All of these, except the Watchmen, should be placed under the accounts of the Development, Mining, and Prospecting work in the proportions of say one-third for each. This would leave the item of "General Expense" to include: Police, Stables, Watchmen, and very petty items of expense.

I have also to suggest that a proportion, say one-fourth of costs, of the General and Assistant Manager's salary be added to the total costs of the Mine, and here again distributed over the items mentioned.

Contractors.

I have made strict inquiry into the costs of contract work and include table which shows the details of work done by contract, and the price paid for the same.

MINE CONTRACTS.

YEAR.

Hdg. Feet.	Total Cost of Hgs.	X. Cut Feet.	Total Cost of X. Cut.	Raise Feet.	Total Cost of Raises.	Stope Feet.	Total Cost of Stopes
8,068	$151,527.50	872	$16,555.75	1,232.5	$22,900.00	1,490	$2,163.25

	Headings.	X. Cuts.	Raises.	Stope-Raises.
Average cost per foot.....	$18.78	$18.98	$18.58	$1.45

I find that on a production of 31,451 tons for the year

Headings cost	$4.81	Per Ton.
Raises	0.72	" "
Cross-Cuts	0.52	" "
Stope-Raises	0.06	" "

This table also shows costs per foot of work done with consumption and explosives also at per foot.

These costs include tramming over exceptionally long distances, and are generally low, rather than high.

The general average of 2.71 lbs. of Dynamite consumption per

foot driven by Contractors is also, in my opinion, unusually small, and would indicate that *possibly* Dynamite really used, has not been charged for. Every Mine has this question between Contractors paying for explosives, and Company-men using explosives, to deal with, and all that can be done is to minimize it to the lowest possible degree by the introduction and carrying out of a system to guard against it. The present system of explosives issued to contractors is not the best, and does lend itself to possible abuses.

Stoping.

This is now done by days' pay-men at a cost of $3.00 per shift. These men drill in the average 6.54 ft. per day, drilled in 3.75 holes of an average depth of 1.75 ft. for each hole. Drilling costs about $0.45 per foot, which is good work at a cost which might be reduced by lowering wages.

The costs of Mining are actually small, when the conditions properly belonging to the Mine are appreciated.

Table No. 1 clearly shows that Development, Deadwork and Timbering are the costly items of expense. Together they account about for $13.50 per ton of ore produced, and though they may fluctuate occasionally, they cannot be materially reduced.

Two tons of waste must be broken in the stopes for every ton of ore produced, and headings and cross-cuts to the amount of one-third of a foot driven for every ton of ore sent to the Mill.

The expense of Timbering is also greater in this Mine than is usually the case in narrow veins, and it is due to the nature of the ground, the distance traversed and the necessity of renewals.

Tramming.

This at a cost of $0.75 per ton of ore must increase in future, as the Mine grows larger.

All these, the main items of expense, will require very close

and economical management, only possible as systems and methods may indicate, but they can never be materially reduced.

The other items of expense not specifically mentioned, are normal, and need no special comment. They are incidental to every large Mine.

Supplies.

The supplies consumed by the Mine have claimed considerable of my time and attention.

I find that the yearly consumption of Dynamite amounts to 95,354 lbs., or about 1,900 cases of 50 lbs. each.

Fuse comes to 728,970 ft., and caps to 307,605. Candles were used to the amount of 64,280 lbs.

Not quite all of these amounts were actually consumed in the Mine, a small proportion was sold to the Government and others, and correctly accounted for. Based on actual consumption, I find that:

Contractors used 0.402 pounds of dynamite per hole
" " 2.09 feet of fuse per hole
Company's Stopers used 0.28 pounds of dynamite per hole
" " " 3.01 feet of fuse.

This is arrived at by taking a basis of one cap per hole fired (which is correct enough, within 1%).

As Contractors were employed mainly in driving headings and cross-cuts, the Dynamite again from this point of view seems too small in quantity, and the Fuse distinctly seems too small. This is an inference only, because number of holes and their depths are never kept by Contractors.

In the stopes the Dynamite is very slightly too high, and the Fuse is correct. In my opinion the figures would have been more correct had they shown per Cap used:

Contractors ..... 0.45 pounds of dynamite
" ..... 3.00 feet of fuse
Company's stopers ..... 0.25 pounds of dynamite
" " ..... 3.00 feet of fuse

Mine Timber.

It was impossible to arrive at any idea of the actual consumption of this important item of expense, or to judge if there had been any wastage of it.

The accounts show an apparent consumption of 48,667 pieces of lagging, and 14,703 pieces of round timber for the year, or for each working day, 162 pieces of lagging and 49 pieces of round timber. This seems to be large, but there being no daily account kept of timber actually sent into the Mine, it is now impossible to say where these were used.

Generally.

It appears to me that, while the Mining costs are not unduly high, still that they may be reduced by more effective system in time-keeping, and the issues of stores, and by possible reductions in wages.

The method of Survey work has attracted my attention, as not being the best practice. The angular deflection method is in use, which cannot be correctly plotted over such large areas as are covered by this Mine, and I would suggest that the co-ordinate method be put into practice at once.

TRAMWAY.

The expenses for ore-sorting, crushing, and conveyance of ore to Mill are distributed over one sheet for convenience called "Tram. Sheet." During the month of September, 1906, handled 2,444 dry tons, and sent them to Mill at a cost for labor of $2,549.54, and for supplies of $1,016.12.

At per ton crushed at Mill, this figures out at $1.30, and is apparently a low figure.

In my opinion, the cost can be reduced by putting in a bumping table below grizzlies, to serve as a pushing table, and as a

conveyor to crushers. This will save the labor of six men, or in value say $7.50 per day. Four boys can be dispensed with on sorting belts, and a further saving made of say $3.50. Two men can be dispensed with who are at present feeding ore to buckets, or say $3.00 per day. The total saving in labor can be put at $14.00 daily, or nearly $450.00 per month.

There is nothing to say in regard to supplies. These are necessary to the Halliday system of cable conveying which is in use.

In regard to the Tramway, I cannot refrain from here pointing out, that when a new cable-way is considered, the extreme importance of its being able to carry men and supplies, both up and down, should not be lost sight of.

Note.—The adit through which all ore comes from Mine to Sorting Plant might be surveyed to advantage with a view to its partial straightening. Its present condition is costly on locomotive and cars, and a saving might here be effected of perhaps $1,000.00 yearly.

PLANTEL.

The Plantel costs for month of September last amounted to $15,770.36 for labor, and $2,482.91 for supplies, figuring as follows:

Accounts:	Labor.	Supplies.
Totals.....	$15,770.36	$2,482.91

The total cost for the year just past is thus divided on a basis of 31,451 tons crushed:

Accounts:	Labor.	Per Ton.	Supplies.	Per Ton.	Total Per Ton.
Mining	$536,734.12	$17.07	$141,071.72	$4.48	$21.55
Mill	97,833.39	3.11	246,453.38	7.83	10.94
Tramway	35,776.68	1.13	15,230.42	0.49	1.62
Plantel	198,607.03	6.31	23,823.52	0.76	7.07
Freight on Product—Average of.....					3.33
					$44.51

CONCLUSION.

The costs for the year which have now been detailed and discussed, plainly indicate that they have been too high. Direct losses have occurred which alone have raised costs by $0.31 per ton crushed. The suggested reduction of expense in the future has been shown wherever possible. No estimate of reduction of cost can be made with any accuracy, but my opinion is that they can probably be lowered by $2.00 per ton with the present plant. To assist towards such a reduction, the completion and carrying out of Systems (now partly in use) require further explanation.

I therefore submit this as an addendum to my report, in order that you may cause its immediate institution, if you may see fit.

Yours faithfully,

(Signed) GEO. D. STONESTREET.

San Juancito, Honduras, C. A., Nov. 26, 1906.

To the President,

New York & Honduras Rosario Mining Co.,

New York.

DEAR SIR:—

I beg to submit for your consideration the following report of the operation of your property during the year ending October 1, 1906:

GENERAL.

The Mine worked steadily and there was no serious delay nor setback. The tonnage mined was greater than during the previous year, and the largest in the mine's history.

The months of February to May were almost without rainfall, and the Mill Water Power was cut down more than one-half. Fortunately, we were able to complete in March the installation of the new *Pipe Line* and *Electric Power Plant,* and with its aid all the batteries ran through the season of drought.

In the entire year only 172 hours were lost at Mill, making a record unequalled in our milling work, and seldom attained at Mining Plants working under the uncertain conditions of power and ore supply to which our Mill is subject.

The ore crushed and put through the mill was 31,443 tons. Increase over former year of 2,759 tons.

The Cyanide Plant to treat slimes has run since April. The Tube Mill and Slimes Pipe from Rosario since August. With these the extraction has been materially raised, and although we have utilized a lower grade of ore, and our batteries have aver-

aged less than last year, the product of Silver increased 144,788 ounces.

The large proportion of ore which came from the West Vein (always low in gold) cut down the product of that metal 1,318.09 ozs., but after making due allowance for this decrease, the total output shows a substantial increase over that of any former year.

In September the heavy rains caused much damage to the roads, and made freighting conditions difficult to the Coast. This rainfall continued in October, and culminated in the disastrous storm of October 9 to 12, which extended from the Southern portions of the United States to South America, and which caused much loss of life and property throughout Central America and Mexico.

This storm brought heavy landslides and carried away our Canals, Flumes, Bridges and Roads. The main damage occurred at Peña Blanca, where a slide carried away our buildings, burying the Air Compressor and Motor in stones and mud, and covering the mouth of the Tunnel many feet deep under a mass of rock, tree trunks and sand. At Tegucigalpa the flood carried away the bridge connecting the City with Comayaguela and destroyed part of our Agency.

The cost of restoring the Roads, Flumes, etc., has been large, and the Mine work has been greatly retarded. We were left without power for our Air Drills and Ventilation. Fortunately, neither the Electric Motor nor Compressor were seriously damaged, and they were able to resume work in three weeks. At date of writing this, the greater part of the damage caused by the storm has been repaired.

MINE.

The Yearly Advance Sheet shows the following:

Drifts run in ground with timber		5,194.5 Ft.
Drifts run without timber		3,025. "
Raises		1,000.5 "
Stope Raises		925. "
Cross Cuts		1,038. "
Prospect Drifts—Jutiapa	289 Ft.	
Coronado	85 "	374. "
Total		11,557 Ft.
Old Levels, etc., re-timbered		1,900 Ft.

Upon our Main Veins the above advance was as follows:

Guadalupe and West Veins	5,150 Ft.
Colonia Vein	730 "
Buenaventura Vein	250 "
New North and Socorro Veins	425 "

Cars of ore and waste trammed out through Rosario Tunnel by Electric Locomotive 44,280

Supplies consumed in Year's work:

Powder	60,449	Lbs.
Fuse	648,391	Feet.
Caps	216,210	
Candles	47,011	
Battery Caps	330	
Steel	576	Bars, 7/8 in.
	29	" 1 in.
	46	" 1¼ in.
	37	" Special
Charcoal	$6,202.25	
Timber: Lagging—Pieces	49,060	
Round Logs—Pieces	14,605	

CONTRACTORS.

Powder	31,677 Lbs.
Fuse	164,970 Feet
Caps	78,675
Candles	13,334 Lbs.

The above statements show:

Mining and delivering ore at Sorting Plant: $21.41 per ton, a reduction of $2.35.

11,550 feet advance was made, and both Development and Prospecting have been carried on with increased energy and force.

The results, however, of such prospecting have not given the reward that we experienced during the three years before.

In November last the West Vein, which was the main source of our ore supply, became low grade or barren in all levels. Various chimneys or sections of barren ground had been met before in the thousands of feet through which this vein had been worked, but they proved of limited area and after passing through them, the vein recovered its accustomed values. It was felt, therefore, that the same conditions were before us, and we continued to prospect and follow the vein. The barren showing has, however, proved more extended, and no ore has been developed in the West Vein since November last.

No change has occurred in the formation, and our surface prospect work on the Jutiapa or West side of the mountain, in the region where this West Vein should outcrop, has disclosed similar veins following the same course and carrying values. I feel, therefore, that we must continue to follow this most important vein from present heading in 700-foot level toward the West, and at same time push surface work on the Jutiapa side, with the expectation that we shall again find this West Vein mineralized, and carrying the large values which have rewarded us in the past.

The Guadalupe Vein, which we are following to the East, is

wide and rich in the Headings of 350 and 500 Levels. In the 150 Level below we are now entering the same body of high-grade ore.

Two new veins have been opened during the past few months, Both were found North of the Guadalupe; both running toward the North or Crucero side of the mountain.

The first, which bears the name of "New North Vein," is being followed upon the 350, 500 and 600 levels, in Blocks 50 and 51. So far it has not shown great width, but is constant and carries ore of high grade. It dips toward the West and its course is due North.

The second, called the "Socorro," we now have upon the 350, 500, 600 and 700 levels. It is a strong vein from 1 to 3 ft. in width, carrying high values. Its course is North 10 dg. E. and dips E. 75 degrees from horizontal.

The Colonia Vein has now been followed South over 400 ft. upon the 150 Level. It has given several fair stopes, but is irregular in width and grade. It is being run not alone for its ore, but in hope that in this hitherto unprospected ground it may lead us to the extension of the old "Rosario" Vein.

In Colonia, on the Crucero side of the mountain, the main work has been done in Tunnel No. 3, which advanced over 500 ft. A part of this advance on the vein has disclosed a wide and rich body of sulphide ore. This is important, not only for its value, but for the knowledge that in these deeper levels of the Colonia the ore bodies continue.

A cross-cut is now being run from the end of the Lower 300 Guadalupe, in Block 47, to connect with Tunnel No. 3, which will afford means of transporting the Crucero ore to the mill at San Juancito. The distance between the Headings is now a little over 600 ft. and connection can be made in six months or less.

Surface prospecting has been pushed actively in the Crucero

district with the result that we have opened a promising vein near the old Concepcion workings. Upon this we have driven 85 ft., the ore holding strong up to the Headings.

In the Mina Grande, or 900 Cross--Cut, a vein has been opened which appears to be the extension of the San Vicente. Upon this we now have a stope 140 ft. long. Should this hold to the old San Vicente workings, we have before us more than 1,000 ft. of ore- bearing ground.

Numerous other small veins and outcrops have been opened by our prospect work, several of which carry values and will be followed in the coming year.

The ore reserves indicated in last report, although measured and taken with the greatest care, and figured upon the same basis as used in previous years, failed for the first time to respond to the estimate made. The veins narrowed as the stopes went upward, and in the territory above the 700 and 900 levels, the veins proved not only narrower, but the ore lower in grade. Much that we counted upon in our prospect reserves above 900 level will not pay to mine. This was unlooked for. There was nothing in the veins before us, and upon which we based the estimate, to warn that either the size or values would change as they went upwards. The result is a falling off in quantity of ore in reserve from that reported in October last.

While we cannot at the present time look to the upper Zone for the ore which it then promised, the new development in the Guadalupe to the East and Socorro to the North, both lying in the ore-bearing region already proved, should go far to again build up the ore reserves in the coming year.

TRAMWAY AND SORTING PLANT.

The statements show the increased tonnage carried over the Tramway, and that cost of transporting same was reduced 31 cents per ton.

A 4-inch galvanized iron pipe, leading from the tanks below Rosario Patio, now carries directly to the batteries at mill the liquid slimes and water used in cleaning the ore. This pipe transports daily some five to six tons of solids, which average 30 pesos Silver per ton. A small part of this value was saved last year upon the canvas tables below Rosario Plant, but the greater portion was wasted. This pipe has proved a great economy and materially assisted the extraction.

MILL.

RECAPITULATION OF COSTS PER TON ORE.

YEAR ENDING OCTOBER 1, 1906.

MINING: (Per ton del. at Cleaning Plant)

Accounts.	Amounts.	
Assaying and Sampling	0.25	
Building and Repairs	0.19	
Development	5.18	
Ore Transportation	0.04	
Ore-Breaking (Mining)	7.22	
Prospecting and Deadwork	3.85	
Underground Repairs	0.79	
Power	0.06	
Surface Prospecting	0.17	
Timbering	1.42	
Tramming Operation	0.72	
Tramming Repairs	0.19	
Electric Haulage	0.73	
General Mine	0.57	
Police, Soldiers and Watchmen	0.03	
		Pesos: 21.41

CLEANING: (Per ton del. at Mill)

Ore-Sorting	0.66	
Assaying and Sampling	0.08	
		0.74

TRAMWAY: (Per ton del. at Mill) 0.88

ACCOUNTS.	AMOUNTS.	
MILLING: (Per ton crushed)		
Assaying and Sampling	0.67	
Building and Repairs	0.08	
Crushing	0.52	
Concentrating	1.58	
Amalgamating	6.77	
Cyaniding	0.57	
General Mill Labor	0.77	
		10.96
FREIGHT ON PRODUCT:		
Total paid out—Pesos	111,558.08	
Total tons crushed	31,443.00	3.55
IMPROVEMENTS, REPAIRS & GENERAL EXPENSE: (p/t. crushed):		
Building and Repairs	0.45	
Power	0.38	
Light	0.25	
Telephone	0.05	
Ice Plant	0.04	
Road, Constr. and Repairs	0.44	
Police, Soldiers and Watchmen	0.37	
Office, Management, Foremen	1.25	
Pensions	0.06	
General Labor	0.08	
Schools	0.15	
General Expense, Agency Exp., etc	2.75	
Property Improvements	0.22	
Traction	0.53	
Taxes	0.12	
		7.14
TOTAL COST PER TON: F. O. B. AMAPALA	Pesos:	44.68

In this department the constant work and improved extraction must claim your attention. The detailed statements show increase of 3,010 tons put through the mill; extraction raised in the last months to 87½% of value delivered at batteries; and reduction in

milling costs of 80 cents per ton of ore crushed. To the Cyanide Plant treating slimes and to the Tube Mill we owe the large increase of extraction which to-day compares favorably with many plants working upon ores less refractory than those of Rosario.

We are still in crying need of greater capacity in the Cyanide Plant now treating slimes. It only handles one-half the quantity which comes from the mill to-day. The rest is lost. Also we urgently need a Cyanide Plant to treat the sands from Wilfley Tables, which now go to the Amalgamating Pans.

Not only can the enormous expense for Quicksilver, Bluestone and Salt be cut out, but the large items of cost for Pan and Settler machinery and Cord Wood be avoided, and the use of both labor and power reduced to a fraction of their present quantity. The cost alone for "Amalgamating Supplies," during last year, was $174,203.01, or more than one-half the whole cost of our mill work. With the "Amalgamating" labor added it was $212,807.61, or 62½% of the whole milling cost; while only $34\frac{8}{10}$% of the product was obtained by Amalgamation. The above shows the immediate need of changing this wasteful and expensive process, and I urge that it be done without further delay.

Our present Cyanide Plant has demonstrated that the most difficult portion of our product, viz: the slimes, can be treated with fair extraction and at low cost. The sands are more amenable and can be readily treated with better results.

PROPERTY IMPROVEMENTS.

The Cyanide Mill and new Electric Power Plant, with 10-inch Pipe Line, shipped from New York when last year's report was made, have been installed and both proved successful. The expenditure incurred has already been repaid by the increase to our output, and larger battery extraction.

The Tube Mill erected has proved another advance toward better work.

A 4-inch Pipe carries the Rosario Slimes to the mill, a distance of 5,600 ft.

A new Electric Locomotive has been added for service in transporting ore through Rosario Tunnel from Chute 51 to Sorting Plant.

A new Saw Mill and Carpenters' Shop built, making it cheaper to saw and handle lumber. Moving this department takes away from the Machine Shop and its valuable contents the risk of fire which came from having Carpenters' Shop and Saw Mill in the same building. Separating there should secure a lower rate of insurance upon the Machine Shop and adjacent buildings

A hospital, with six cots, has been erected to enable the physician to better care for those injured in mine or mill.

The above appear upon the inventory, and notwithstanding that there has been written off for depreciation and loss during past year $96,846.96, the total amount represented in the Inventory has increased $105,521.23. Generally, the Company's property is in better repair and condition than it was twelve months ago.

CONCLUSION.

The year's work shows the largest output of Silver, and the greatest profit in the mine's history. The amount paid out for construction was large, but this is represented in the new plants, which will augment and cheapen future production.

I desire to call to your attention the good work performed by the heads of the various departments and their assistants The records of the Mine and Mill speak for themselves At the former more ore produced and at cheaper cost, notwithstanding that mining was done at greater distance from surface, and more

prospecting and development work carried on than ever before. At Mill, larger tonnage treated, better extraction and lower cost. Such improvement can only come with competent superintendence, allied with energetic work.

In the Mechanical and Accounting Departments all have worked with earnest effort for the Company's welfare and to those efforts much of the year's prosperity is due.

Yours truly,

(Signed) J. H. WEDDLE,

Manager.

New York, December 19, 1906.

To the President and Board of Directors,

GENTLEMEN :—

The Treasurer's report of the finances of this Company, together with the audit of same made by the Security Audit Company of New York, are herewith submitted.

The figures presented show that the value of our production during the year has been the largest in our history, having for the first time passed the million dollar mark (act. $1,112,171.69).

We worked 30,944 tons of ore, producing 1,618,800 ozs. of Silver and 3,062 ozs. of Gold.

Our net profit was $427,191.82, out of which we have paid nineteen dividends, amounting to $285,000.00; leaving our Cash Reserve at $294.987.00.

Our surplus account stands at $1,283,987.05.

The report of the Audit Company shows the details of above figures, as also the general accounts.

Herewith is submitted a statement of the production and dividends paid annually.

Respectfully submitted,

S. HEIDELSHEIMER,

Treasurer.

ANNEX.

The following amounts are made up to November 30, in each fiscal year:

Bullion Production.		Dividends		
1882	$2,452.27			
1883	12,900.42			
1884	149,741.39			
1885	244,444.70			
1886	224,157.58			
1887	613,446.05	1887	No. 1	$37,500
1888	767,632.15	1888	Nos. 2 to 5	60,000
1889	590,189.55	1889	Nos. 6 to 14	150,000
1890	113.28			
1891	369,587.19	1891	Nos. 15 to 16	30,000
1892	614,498.67	1892	Nos. 17 to 21	165,000
1893	492,534.87	1893	Nos. 22 to 25	150,000
1894	392,485.92	1894	No. 26	37,500
1895	158,164.42			
1896	449,525.88	1896	Nos. 27 to 28	30,000
1897	568,872.06	1897	Nos. 29 to 40	180,000
1898	611,467.76	1898	Nos. 41 to 48	120,000
1899	798,994.77	1899	Nos. 49 to 60	180,000
1900	827,443.12	1900	Nos. 61 to 75	225,000
1901	780,760.18	1901	Nos. 76 to 93	300,000
1902	490,273.34	1902	Nos. 94 to 100	105,000
1903	436,818.29	1903	No. 101	15,000
1904	721,374.87	1904	Nos. 102 to 108	105,000
1905	993,065.39	1905	Nos. 109 to 121	180,000
1906	1,112,171.69	1906	Nos. 122 to 139	285,000
Total	$12,423,115.81		Total	$2,355,000

THE SECURITY AUDIT COMPANY
OF NEW YORK.

20 BROAD STREET

New York, December 14, 1906.

To the President and Board of Directors of the
New York & Honduras Rosario Mining Co.,
New York, N. Y.

GENTLEMEN:—

In compliance with your instructions we have audited the books of account of your corporation kept at your office in this city, *for the fiscal year from December* 1, 1905, *to November* 30, 1906, and certify that—subject to the valuation of the inventories—the same are correct and in accordance with the Balance Sheet, Profit and Loss Statement and Surplus Account annexed hereto, and forming part of this report.

Similar to the method employed last year, the inventories were taken at the mines on October 1, 1906, instead of at the end of the fiscal year, and the expenses there stated in the Profit and Loss Account cover the twelve months ended September 30, 1906.

The net profit for the fiscal year, amounting to $427,191.82, has been applied as follows:

1.	Payment of Dividends	$285,000.00
2.	Increase in value of Plant, Machinery and Development,	97,483.19
3.	Increase in value of Cash Assets	32,970.08
4.	Reduction in Bills Payable	11,738.55
		$427,191.82

Respectfully submitted,
(Signed) THE SECURITY AUDIT CO. OF N. Y.
GEO. WEAVER, *Secy.*

BALANCE SHEET AS OF NOVEMBER 30, 1906.

ASSETS:		
Mines, Real Estate other than Buildings, Concessions, etc	$1,687,978.00	
Tramway and Gravity Road	30,550.00	
Buildings	49,263.00	
Machine Shop	30,373.00	
Mill Machinery	207,036.00	
New Power Plant	108,517.00	
Honduras Transportation Outfit	9,964.62	
Laboratory Outfit	1,000.00	
Surveyors' Implements	2,115.00	
Property at Agencies	21,052.00	
Live Stock	6,447.00	
Office Furniture in New York	1,230.00	
Bullion and Concentrates	270,000.00	
Ore, Slimes, etc	30,959.00	
Supplies	164,722.11	
Cash	1,647.69	
New York City Bonds, 1911, at par	50,000.00	
Bills and Accounts Receivable	8,840.00	
Superintendent's Account in Honduras	139,440.80	
LIABILITIES:		
Bills Payable		$37,148.17
Capital Stock		1,500,000.00
Surplus Account		1,283,987.05
	$2,821,135.22	$2,821,135.22

PROFIT AND LOSS STATEMENT
For the Fiscal Year Ended November 30, 1906.

To Bullion and Concentrates on hand or in transit December 1, 1905	$245,000.00	
" Ore, etc., on hand October 1, 1905	21,782.00	
By Bullion and Concentrates sold during the fiscal year		$1,087,171.69
" Bullion and Concentrates on hand or in transit November 30, 1906		270,000.00
" Ore, etc., on hand October 1, 1906		30,959.00
To Operating Expenses (see remarks in Report)	657,593.33	
" Balance, Gross Profit	463,755.36	
	1,388,130.69	$1,388,130.69
By Balance carried down		463,755.36
" Interest on Bonds		1,500.00
To Office Rent	2,137.58	
" Salaries	17,508.67	
" Directors' Meetings	3,789.00	
" Stationery	176.25	
" Postage	299.09	
" Cables and Telegrams	309.25	
" Taxes	193.08	
" General Expense	1,567.44	
" Legal Expense	100.00	
" Honduras Examination	5,680.00	
" Honduras Transportation written off	4,804.70	
" Laboratory	623.48	
" Reduction in Value of Bonds (from $50,875 to $50,000)	875.00	
	38,063.54	
" Balance being net profit for the year	427,191.82	
	$465,255.36	$465,255.36

SURPLUS ACCOUNT, NOVEMBER 30, 1906.

By Balance November 30, 1905.....				$1,141,795.23
To Dividends Paid:				
Dec. 22, 1905.....	2%	$30,000.00		
Jan. 19, 1906.....	1%	15,000.00		
Feb. 24, 1906.....	2%	30,000.00		
Mar. 24, 1906.....	1%	15,000.00		
Apr. 20, 1906.....	1%	15,000.00		
May 18, 1906.....	1%	15,000.00		
June 22, 1906.....	1%	15,000.00		
July 21, 1906.....	2%	30,000.00		
Aug. 24, 1906.....	2%	30,000.00		
Sept. 21, 1906.....	3%	45,000.00		
Oct. 19, 1906.....	2%	30,000.00		
Nov. 23, 1906.....	1%	15,000.00		
	19%		$285,000.00	
By Net Profit for year ended Nov. 30, 1906.....				427,191.82
To Balance Nov. 30, 1906.....			1,283,987.05	
			$1,568,987.05	$1,568,987.05
By Balance Nov. 30, 1906.....				$1,283,987.05

New York, December 1, 1906.

To the President and Board of Directors
of the New York & Honduras Rosario Mining Co.

GENTLEMEN:—

During the past year the improvements inaugurated some time ago have been completed, the details of which are given in the Manager's general report herewith.

The expenditures for machinery during the year have been heavy, but they were necessary for the profitable and economical running of our business. Among the most important are the second electrical locomotive, new electric machinery, dynamos, arc lights, steel rails for mine, rock crusher, pipe for mine slimes, etc., all of which are now doing proper service.

The inventory values show satisfactorily when compared with the previous year, and changes will be noted by comparison: A total of 94,314 Pesos were written off for depreciation. The total increase in value, however, for new cyanide and power plants, auto cars, etc., was 105,521 Pesos.

The general stock of supplies has been fully kept up and in advance of any possible delays in shipping or transporting; our object being to always have on hand in the warehouse at the mine everything needful for at least three months in advance. In anticipation of the early changes from Amalgamation to Cyaniding, we are now curtailing our large shipments of castings, quicksilver, and chemicals, all of which will make a considerable reduction in expenses.

Respectfully submitted,

ERNEST SCHERNIKOW,

Secretary.

REPORT

OF THE

NEW YORK & HONDURAS ROSARIO MINING COMPANY

NEW YORK, DECEMBER 1st, 1907

OFFICERS 1907-1908

W. S. VALENTINE, *President.*
H. G. B. FISHER, *Vice-President.*
S. HEIDELSHEIMER, *2d Vice Pres. & Treas.*
ERNEST SCHERNIKOW, *Secretary.*

BOARD OF DIRECTORS 1907-1908

H. H. BABCOCK,
L. L. CLARKE,
H. G. B. FISHER,
S. HEIDELSHEIMER,
FORREST H. PARKER,
MAXO SOTO,
E. J. SWORDS,
W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1907-1908

FORREST H. PARKER, *Chairman.*
L. L. CLARKE,
S. HEIDELSHEIMER,
P. R. WEILER,
MAXO SOTO.

REPORT OF THE

New York & Honduras Rosario Mining Company.

New York, Dec. 18, 1907.

To the Stockholders:

In presenting to you the Annual Report, showing the work done, the progress made, and the general condition of your corporation, we feel that, in spite of the many drawbacks that have been met during the fiscal year, the situation is a good and hopeful one for the coming year. Many beneficial changes have been made in the management as also in the economic.

Early in the year, the resignation of your former Manager was accepted. The change did not show the anticipated results, therefore, in July your President made a trip to the mine, taking personal charge of the business and reorganizing the works. He returned in October. Mr. Jos. M. De Hart, for many years an employee of the Company, was appointed General Agent, in charge of the business and financial matters, and E. A. Nis, Esq., E. M., former Mine Superintendent, was appointed General Superintendent, in charge of the works.

The depletion of the ore reserves in the mine, as reported in 1905 by the expert Frederick H. Minard, Esq., E. M., caused continued extensive development work for laying bare larger reserves. We are pleased to state that this was accomplished and the reserves increased over what they were at the time of making our last Annual Report. The general condition of the mine is favorable, the prospects are good, and we look forward to better development during the coming year.

In former years, the strength of our mining work has been on the main veins East and West, the major part of our ex-

tensive mineral zone not being prospected. During the past year, extensive crosscuts have been driven North and South through virgin territory: in the north crosscut, a vein of considerable extent, and which is producing high grade milling ore, was cut. This crosscut has now almost reached the Colonia vein, which is known as a vein of high grade. In the south crosscut, several mineralized stringers have been struck, which although narrow, are of high grade and indicative of future values. It is hoped that this crosscut will cut the throw of the original Rosario vein.

THE MILL.

The mill has been kept steadily running during the past year with a full supply of ore, except during the months of May, June and July a drouth reduced our water supply to such an extent, that at times we barely had power enough to run one-half the mill. The condition of the mill has been kept up to its good standard, and all repairs and replacements have been promptly met.

CYANIDE MILL.

One of the most beneficial improvements made during the past year has been the extension of this plant, with capacity sufficient to handle the full ore output of the mine. This is now nearing completion. It has been a difficult proposition, but when the full plant is running, our working cost will be reduced materially, and a much higher percentage of extraction obtained. We anticipate entirely discarding the amalgamation plant, and possibly the concentration plant, in the near future.

In combination with the above, the pebble tube mill has proven so satisfactory in sliming the ores, that a duplicate of same has recently been installed.

ECONOMICS.

The expenses at the mine had gradually risen beyond the normal, and in September drastic steps were taken to reduce same.

A general cut in wages of about 15 per cent. was made. This resulted in a strike lasting only two days, when the full number of men was again at work at the reduced scale. As a partial compensation for the above, the Company opened a store with a plentiful stock of eatables, working clothes, etc., which is being sold to the employes at prices far below those charged by the merchants, but with a small margin of profit. At the same time, a Company kitchen was established, where the laborers could board at much lower rates than charged in the town. Mule freight rates were also materially reduced.

As a result of the above, our working charges have been reduced from 44.68 Pesos per ton ($29.66 U. S. C.), in 1906, to 42.20 Pesos per ton ($28.57 U. S. C.) in the year just passed.

FINANCIAL.

The Treasurer's Report shows the financial condition of your Company at the close of the fiscal year, showing that we have paid during the year 14 per cent. in dividends.

Your attention is called to the fact that the extensive improvements made during the past year were paid for out of the earnings of the Company, which, had they been declared in dividends, would probably have increased the dividends 5 per cent. more; but your Board of Directors has no other means of providing the funds for these improvements except from the profits, as your Company has no authority to issue bonds or stock to provide for improvements permanent or otherwise, and your Board would prefer to continue in this way, for by so doing, your property is brought to a higher state of proficiency without adding to your capital obligation.

POLITICAL.

During the past year, Honduras passed some rather turbulent months; a revolution of considerable proportions placed the present Government in power. Our works were in no wise delayed or molested, and we are pleased to say that our relations

with the powers are of the most friendly kind, they being more than anxious to assist our representatives in every way.

It is hoped that the Peace Conference now sitting in Washington will so arrange the amity amongst the Republics, that a long-lived peace will be established.

Our credit in the country is of the highest, and our drafts are sought by the merchants in preference to all others.

Attached hereto, we submit the reports of the General Agent and General Superintendent, both of which give detailed information.

Respectfully submitted,

W. S. VALENTINE,
President.

San Juancito, November 11, 1907.

To the President,

New York.

DEAR SIR:—

As per your instructions, we beg to submit the following resumé of the work accomplished on the properties of this Company in Honduras during the year ending September 30th, 1907.

MINE.

The work of this department is given you in a separate report by the General Superintendent, in which is embodied the estimate of the ore reserve and a general description of the plans for the vigorous prosecution of the work during the coming year. The ore reserves, however, are figured as existing November 1st, instead of October 1st. The total mining costs are depicted in the statements of costs which form a part of this report, showing an expenditure of 591,936.12 Pesos, or, with 28,098 dry tons crushed, 21.23 Pesos per ton ($9.34 U. S. C.).

TRAMWAY AND CLEANING PLANTS.

Our Transportation, Sorting and Cleaning plants were kept in constant operation throughout the entire year, and while there were slight delays with the Tramway, due to replacing of towers and other repairs, the Mill was never short of ore as there was always sufficient in the Mill bins and in the reserve dump to keep the batteries fully supplied. The total expenditure for this branch of our operations, as shown in the statements, was 55,332.96 Pesos, or 1.98 Pesos per ton crushed.

This cost is a little higher than for 1906, which is explained by it being charged with "Repairs to Buildings," "Lighting" and proportion of management which it never was before.

MILL.

Serious interference was met with during the months of April, May and June in the crushing of ore, owing to the severe drought and shortage of water power. Although in April it was not felt seriously until the latter part of the month and did not so materially affect the tonnage for that month, in May and June the water was so scarce that the Mill could only be run to two-thirds its capacity, making a very decided decrease in the product for those months. The monthly product and operating expenses are included in the statements, the grand total for the year showing:

	Oz. Silver.	Oz. Gold.
235 bars of Bullion, containing	363,850.34	4,177.95
726.33 tons of Concentrates, containing	460,182.16	6,641.01
5.^{670} tons of Cyanide Precipitates, containing	98,938.11	1,003.47
Total	922,970.61	11,822.43
In addition to this there were shipped 6.6 tons of high-grade ore, containing	567.85	127.93
Total	923,538.46	11,950.36

The total milling cost for the year, including product delivered on board steamer at Amapala, was 385,742.45 Pesos, or 13.83 Pesos per ton crushed. The total dry tons crushed 28,098.

The buildings and machinery of this department have been kept in thorough repair. The additions during the year have consisted chiefly of a new Tube Mill which has been installed to work in connection with the new enlarged Cyanide Plant referred to later. This new Tube Mill arrived on the property during the month of July, but owing to some of the parts reaching here in a

damaged condition we have as yet been unable to get it in operation, as the construction work on the Cyanide Plant, which we consider of the first importance, and the running repairs, have kept our force of mechanics fully employed. The final connection of this Mill, however, will be finished before we are ready for it. Greater tank capacity was also installed for the settling of slimes. These improvements represent the increased inventory value of this Department.

Following is a statement of the cost per ton crushed:

Mine Department	Pesos	21.23
Tramway and Cleaning Plant		1.98
Mill Department		13.83
Surface Department		5.16
Total cost per ton crushed	Pesos	42.20
Equal to, United States money		$18.568

Comparison of this year's cost with that of last shows a decrease of 2.48 Pesos per ton crushed.

The Laboratory, Electrical, Mechanical, Surface, Office and Medical Departments, the operative costs of which have properly been proportioned to the accounts given above, have rendered most satisfactory service.

CYANIDE EXTENSION.

This work represents the greatest improvement that has been made and although not yet completed, it will not be long after the arrival of the Agitators for the Tanks and the Pumps before we can discontinue the amalgamation and concentration processes entirely. With the capacity expected in this new plant when finally completed, we anticipate being able to treat the highest tonnage that can be put through our present batteries, but this will not be realized in the first few months, because the idea of your former management was to use a 50-mesh screen and only crush approximately 60 tons per day instead

of employing a 30-mesh screen and working the batteries to their full capacity. The material still short is to complete the plant to handle the larger tonnage. However, the ground is being prepared for the additional tanks required to treat the larger quantity; the saw mill is turning out the lumber necessary for such tanks and the requisite agitating outfit to equip them has already been ordered and this addition will be made just as soon as all the material is on the ground. In the interim between the actual change of the process and the time when we will be in a position to treat the full tonnage of the batteries, we expect to force through the plant which was planned for 60 tons per day, 70 to 75 tons; but owing to the shorter time that will have to be allowed for dilution and aeration, the extraction will be but very little higher than we are obtaining to-day from the three combined processes. We figure that it will be more profitable to work these 70 to 75 tons per day with the lower extraction, during the period of construction of the additional tanks, than to treat only 60 tons with the higher degree of efficiency, or to continue the amalgamation and concentration with their heavy expenses for fuel, labor, pan parts, bluestone, quicksilver, salt and freight.

This construction work was begun in December of last year, but was not prosecuted vigorously until after the arrival of Mr. G. L. Guthrie, in the latter part of March, whom you employed especially for this purpose. Since that time the work has been carried on under his supervision and advice.

The site for the plant is the same that was partly occupied by the small Cyanide Plant erected in the early part of 1905, and the greater part of it being filled-in ground has made the work of erecting proper foundations for tanks, buildings, filter press, etc., and concrete and masonry tanks a most difficult one. The obstacles overcome could only be appreciated by being on the ground. Considering the intricate problems we have had to solve, the delays we suffered in obtaining material, the inadequate force of competent mechanics and numerous other drawbacks we have had to contend with, the progress of the work should be viewed with satisfaction.

The total expense up to the 1st of October, not including the electrical installation and new tube mill, was 90,206.84 Pesos—(for material and freight on same, 60,521.92 Pesos, and for labor 29,684.92 Pesos). For a description of what represents this expenditure of 90,206. 84 Pesos, we refer to pages 15 and 16 of the inventory.

The entire cost of the new Tube Mill was 21,326.03 Pesos. The electrical installation, including the erection of a new 75 H. P. Motor, amounted to 3,245.57 Pesos.

The outlay for this work has been a very heavy one, but our confidence in its ultimate success is firm, and we believe that once in operation, the saving that will be made thereby in higher extraction of values, reduced treatment costs, saving in labor, discontinuance of the necessity for heavy and expensive pan machinery, which alone entails an enormous outlay for freight from the coast to the mine, reduction in the freighting charges on products, etc., will rapidly reimburse you for the expenditure.

AGENCIES.

The different Agencies of the Company at Amapala, San Lorenzo and Tegucigalpa have been well taken care of by the persons in charge. The change made in July in our representation at Tegucigalpa, will undoubtedly prove of incalculable benefit to the Company, as the appointment of General R. Streber as our Agent there, one of the strongest merchants of the City, not only assures us of the absolute security of the trust imposed, but his long years of experience in the country and his valuable assistance in all directions makes the change a highly commendable one.

GENERAL.

The war that prevailed in this country during the months of February to April had only one serious effect in our work—that of closing the port of Amapala just at the time when the steamer bringing a supply of dynamite was about to land. Our stock

of this commodity being exhausted at the time, and the delay we suffered in obtaining this shipment, compelled us to shut down the development work in the mine for three weeks. Although we were bothered considerably owing to the non-receipt of other urgent supplies, for the same reasons, we were enabled to borrow or purchase what was needed to keep the other departments working.

The financial standing of the Company is of the best and in addition to enjoying most cordial relations with the Government, it has the fullest confidence of the whole country.

ECONOMICS.

Since the end of June of this year every effort has been made toward a reduction in working expenses, and we call your attention specifically to the following, which will enable you to appreciate the success of the work in this direction.

Drillers in the mine had been receiving 3.00 Pesos for every six feet broken where the ground was hard, and in the headings and stopes where the ground was softer and greater headway could be made, a like price was paid for every 7 feet broken. In the latter part of June a reduction was made to 2.50 Pesos for the same amount of work which, with an average of 150 drillers engaged daily, means a saving in this branch of more than 15 per cent.

A like economy has been inaugurated with the mine contractors, the price per foot now paid being fully 15 per cent. lower than in former times.

Not alone have reductions been made in the mine, but also in all departments, and the price of our labor all around to-day is between 10 and 15 per cent. less than it was five months ago.

These reductions may not have been apparent in the total of the monthly payrolls, because of the increased number of men at work in the mine, due to the narrow veins and the numerous headings, and the large force of carpenters, masons and labor-

ers employed in the construction of the new Cyanide plant which made up for nearly all the difference.

Another great economy has been made in freights. The former price on concentrates from the mine to San Lorenzo was 7.00 Pesos per load of 250 lbs. From the freight vouchers for the past four months it will be observed that we have gradually reduced this price and the greater part of the product for that period has been forwarded for 4.00 Pesos per load. With an average of 550 cargos per month, the saving in this one item is no small one.

In freights on supplies from San Lorenzo to the mine a similar economy will be noticed, the price per mule load being reduced from 7.00 to 9.00 Pesos to 6.00 and 6.50 Pesos. With the cart freight likewise, of 1.75 and 2.00 Pesos being paid in former months, whereas for more than two months the highest rate was 1.25 for each 25 lbs.

Of course freight rates are always subject to change, depending upon the condition of the roads and the weather, but we consider the prices paid heretofore extravagant and unnecessary and that even at the worst season of the year, the rates can be maintained at a considerably lower price.

Another item that will show a saving in the coming year is charcoal. Within the past ten days we have reduced the price 50 centavos per box which, with an average consumption of about 350 boxes per month, will mean a decrease of about 175 Pesos per month.

In supplies, we believe that the system now established will be far reaching in its results. The length of the inventory is proof sufficient of the care that has been taken to obtain a correct list of the supplies on hand, and as this inventory is the basis for a stock account, something never had before, and which will be constantly kept up to date, and leakages such as occurred in former times will be easily located and corrected and the losses sustained in times when shortages of certain supplies caused a diminution of the efficiency of different departments we feel certain are things of the past.

With the establishment of a well equipped commissariat, where

supplies can be purchased at a much lower price than heretofore, and the opening of a company kitchen where meals can be procured 30 per cent. cheaper than anywhere else in the village, even with the reduction in wages that have been made, our employes are thoroughly contented.

In the coming year we most certainly expect a banner year in the economical working of your properties, because with the conclusion of the construction work for the Cyanide Plant, the change from the expensive amalgamation and concentration processes to the cheaper one of Cyaniding and the general reduction in our labor force when these improvements are finally accomplished, the results are bound to show for themselves.

Respectfully submitted,

J. M. DE HART,
General Agent.

NOTE.—The Peso was equal to 44c. gold on December 1st, 1907.

San Juancito, November 11, 1907.

To the President,
New York.

DEAR SIR:—

I beg to submit the following report as to the condition of the Mine on November 1st, 1907. The report on the plant and new construction work will be made by the General Agent who is also in charge of all accounts.

ORE RESERVES.

The total ore reserves is 12,000 tons.
Average width, .98 feet.
Average assay, silver, 97.40 ounces.
" " gold, .854 "
Total ounces, silver, 1,168,808.
" " gold, 10,251.

The above tonnage has been figured at the rate of 12 cubic feet per ton. In the estimate only pure vein has been taken, so that on account of the narrow widths of the veins fully 30 per cent. must be added for waste mined with the ore; this will increase the number of tons and reduce the value proportionately.

Since the ore reserves of the Colonia workings were calculated by Mr. H. F. Lefevre in 1906, only 165 tons have been extracted and no additional ore has been developed there. The Colonia ore reserves in this report have been taken directly from Mr. Lefevre's report with the reduction of 165 tons.

CANDELARIA VEIN.

This vein was cut from the Guadalupe last December and is at present furnishing considerable of the milling tonnage.

On the U250 a rich ore chute, which was driven through during September and October, has increased the ore reserves by 2,050 tons.

On the U150 the drive appears to be entering the same chute. Should the direction of this vein not alter it will be cut by the Rosario in about 600 feet.

CATALINA VEIN.

The U150 drive has been worked continuously throughout the year. The vein exposed has generally been very narrow, so that only a small tonnage of milling ore has been developed. The chief value of this drive is to prospect the large area of virgin ground lying south of the West vein and west of the Buena Ventura and Northwest veins.

For the last 150 feet the drive has been in broken ground, in which several east and west stringers have been cut. These are being driven on.

Should the fissure of the Rosario vein have continued westward beyond the Buena Ventura and Northwest veins, the U150 Catalina is likely to intercept it so that it is advisable to continue this drive for some distance further.

NUEVA VEIN.

This vein was cut in February by the cross-cut which is to connect L300 Guadalupe vein with the L100 of the Colonia workings.

The Nueva is being developed on the L200 and L300 levels and a cross-cut is being driven to cut it from the L100 Guadalupe.

These workings have given satisfactory assays, but the ground is badly faulted.

NORTH AND SOCORRO VEINS.

The drive headings of these veins are out of ore and as the indications for other ore chutes here are poor very little development work is in progress.

GUADALUPE.

Several abandoned caved-in workings on the Zero and L100 have been re-timbered and considerable high grade silver ore has been extracted from these stopes during the year. It is understood that these workings were abandoned on account of the difficulty of keeping up the ground which is very much broken. The new timbering has, however, proved efficient and there remain 760 tons of rich ore to be mined.

WEST VEIN.

No advance has been made on the U700 since December 1906. This drive is now being re-timbered where necessary in order to prospect the country further west.

The U350 was advanced 75 feet during the year, but although the vein continued of good width the assays were very low.

CROSS-CUT TO COLONIA.

This cross-cut on the L300 level has now 60 feet to be driven in order to be under the L100 level of the Colonia workings. From that point a rise of 105 feet will be needed no connect.

Immediately on breaking into these workings stoping will be commenced there and drives will be started at the most favorable points for prospecting the country.

CONCEPCION VEIN.

As soon as connection is made with Colonia it is the intention to commence work on the Concepcion vein from the surface. At present an old cross-cut going north from the L300 Guadalupe is being reopened for the purpose of continuing it across the country which may contain the Concepcion and San Miguel veins if they penetrate so far into the mountain. If the above veins are intercepted by this cross-cut drives will be commenced on them.

DEVELOPMENT WORK.

During the year the total footage driven was 10,675 feet, as follows:

Driving, 8,097 feet; Cross-cutting, 1,351 feet; Rising, 1,227 feet.

It was necessary to stop all development work for three weeks from April 10th, on account of a shortage of dynamite.

GENERAL.

It will probably take eight months more to complete developing the Candelaria vein if it continues to the Rosario.

The work done on the Nueva has shown this vein to be badly faulted, so that it is impossible to make any estimate of its future.

The prospecting work being done on the U150 Catalina is very important. The cross-stringers recently cut have averaged only one inch in width, but as they sometimes assay as high as 300 ounces silver they are being developed further with the idea that they may either increase in width or lead to a large vein.

The cross-cut from the interior of the mine in search of the Concepcion and San Miguel veins will be driven as rapidly as possible. Should it not expose the veins, they will be worked from the surface.

Respectfully submitted,

EDWARD A. NIS,
General Superintendent.

NOTE.—The profile, sectional, stoping and other maps are on file in this office.

New York, December 18, 1907.

To the President and Board of Directors:

GENTLEMEN :—

In presenting to you the Treasurer's Report for the year just passed, we desire at the start to call your attention to the fact, that during the fiscal year the price of silver has steadily declined, its value at the beginning of the year being over 70 c. per oz., whilst lately it has gone down to 54 c.; this decline has caused a severe shrinkage in the value of our monthly product, while the increase of nearly 9,000 ozs. of gold values in the ores has only partly compensated for the above.

When the new Cyanide Plant is in full operation, we anticipate a material reduction in our working costs per ton, and a considerable betterment in the percentage of extraction.

We have produced during the year 923,538 ozs. Silver and 11,950 ozs. Gold, giving a total value of $791,347.62.

We have paid fourteen dividends, amounting to $210,000.00; our Cash Reserve being $225,115.00, and Surplus $1,196,316.17.

The Report of the Security Audit Company is hereto attached, as also the statement of production and dividends since the beginning.

Respectfully submitted,

S. HEIDELSHEIMER,
Treasurer.

ANNEX.

The following amounts are made up to November 30, in each fiscal year:

Bullion Production.		Dividends.	
1882	$2,452.27		
1883	12,900.42		
1884	149,741.39		
1885	244,444.70		
1886	224,157.58		
1887	613,446.05	1887 No. 1	$37,500
1888	767,632.15	1888 Nos. 2 to 5	60,000
1889	590,189.55	1889 Nos. 6 to 14	150,000
1890	113.28		
1891	369,587.19	1891 Nos. 15 to 16	30,000
1892	614,498.67	1892 Nos. 17 to 21	165,000
1893	492,534.87	1893 Nos. 22 to 25	150,000
1894	392,485.92	1894 No. 26	37,500
1895	158,164.42		
1896	449,525.88	1896 Nos. 27 to 28	30,000
1897	568,872.06	1897 Nos. 29 to 40	180,000
1898	611,467.76	1898 Nos. 41 to 48	120,000
1899	798,994.77	1899 Nos. 49 to 60	180,000
1900	827,443.12	1900 Nos. 61 to 75	225,000
1901	780,760.18	1901 Nos. 76 to 93	300,000
1902	490,273.34	1902 Nos. 94 to 100	105,000
1903	436,818.29	1903 No. 101	15,000
1904	721,374.87	1904 Nos. 102 to 108	105,000
1905	993,065.39	1905 Nos. 109 to 121	180,000
1906	1,112,171.69	1906 Nos. 122 to 139	285,000
1907	791,347.62	1907 Nos. 139 to 153	210,000
Total	$13,214,463.43	Total	$2,565,000

THE SECURITY AUDIT COMPANY OF NEW YORK.

New York, December 14, 1907.

To the President and Board of Directors of
The New York & Honduras Rosario Mining Co.,

New York, N. Y.

GENTLEMEN :—

In compliance with your instructions we have audited the books of account of your corporation, kept at its office in this city, for the fiscal year from December 1, 1906, to November 30, 1907, and certify that, subject to the valuation of the inventories, the same are correct and in accordance with the *Balance Sheet, Profit and Loss Statement,* and *Surplus Account,* annexed hereto and forming part of this report.

Similar to the method previously employed, the inventories were taken at the mines on October 1, 1907, and the operating expenses cover the twelve months ended September 30, 1907, and not the fiscal year under review, excepting N. Y. expenses.

Respectfully submitted,

THE SECURITY AUDIT CO. OF N. Y.

GEO. WEAVER,
Treasurer.

NEW YORK & HONDURAS ROSARIO MINING COMPANY, New York, N. Y.

Balance Sheet, as of November 30, 1907.

ASSETS:		
Cash	$18,438.00	
Bills and Accounts Receivable	9,065.00	
Superintendent's Account in Honduras	131,501.71	
New York City Bonds, 1911, at par	50,000.00	
Loan to the Government of Honduras	27,000.00	
Bullion and Concentrates	162,300.00	
Ores, Slimes, etc	24,803.00	
Supplies	178,766.68	
	601,874.39	
Mines, Real Estate other than buildings, concessions, etc	1,687,045.00	
Tramway and Gravity Road	28,600.00	
Buildings	46,484.00	
Machine Shop	28,435.00	
Mill Machinery	243,050.00	
New Power Plant	108,745.00	
Transportation Outfit	5,385.00	
Laboratory Outfit	1,000.00	
Surveyors' Implements	944.00	
Property at Agencies	19,769.00	
Live Stock	3,190.00	
Office Furniture in New York	1,230.00	
Suspense Account	1,000.00	
LIABILITIES:		
Bills and Loans Payable		$80,435.22
Capital Stock		1,500,000.00
Surplus Account		1,196,316.17
	$2,776,751.39	$2,776,751.39

NEW YORK & HONDURAS ROSARIO MINING COMPANY, New York, N. Y.

Profit and Loss Statement for the Fiscal Year ended November 30, 1907.

To Bullion and Concentrates on hand or in transit December 1, 1906.....	$270,000.00	
" Ore, etc., on hand October 1, 1906..	30,959.00	
By Bullion and Concentrates sold during the fiscal year.....		$899,047.62
" Bullion and Concentrates on hand or in transit November 30, 1907....		162,300.00
" Ore, etc., on hand October 1, 1907..		24,803.00
To Operating Expenses (See remarks in Report)	625,234.61	
" Balance, Gross Profit.....	159,957.01	
	$1,086,150.62	$1,086,150.62
By Balance carried down.....		$159,957.01
" Interest on Bonds.....		1,500.00
To Office Rent.....	$2,500.00	
" Salaries	17,442.46	
" Directors' Meetings.....	4,028.00	
" Stationery	270.64	
" Postage	433.97	
" Cables and Telegrams.....	481.24	
" Taxes	281.69	
" Legal Expenses.....	95.00	
" General Expense.....	2,174.69	
" Honduras Examination.....	6,551.85	
" Honduras Transportation written off	4,868.35	
	$39,127.89	
" Balance, being net profit for the year	122,329.12	
	$161,457.01	$161,457.01

NEW YORK & HONDURAS ROSARIO MINING COMPANY, New York, N. Y.

Surplus Account, November 30, 1907.

By Balance, December 1, 1906.....			$1,283,987.05
To Dividends paid:			
Dec. 21, 1906.....2%	$30,000.00		
Jan. 19, 1907.....1%	15,000.00		
Feb. 21, 1907.....2%	30,000.00		
Mar. 23, 1907.....2%	30,000.00		
Apr. 19, 1907.....1%	15,000.00		
May 25, 1907.....1%	15,000.00		
June 22, 1907.....1%	15,000.00		
July 26, 1907.....1%	15,000.00		
Aug. 23, 1907.....1%	15,000.00		
Sep. 21, 1907.....1%	15,000.00		
Nov. 29, 1907.....1%	15,000.00		
14%		$210,000.00	
By Net Profit for year ended November 30, 1907.....			122,329.12
To Balance November 30, 1907.....		1,196,316.17	
		$1,406,316.17	$1,406,316.17
By Balance December 1, 1907.....			$1,196,316.17

SECRETARY'S REPORT.

New York, December 1, 1907.

To the President and Board of Directors of
The New York & Honduras Rosario Mining Co.,

GENTLEMEN:—

The annexed reports give detailed accounts of our work during the fiscal year ending Nov. 30, 1907, which, under the many disadvantages that confronted us, may be considered satisfactory.

The annual inventory had not been properly revised for a number of years, but the present inventory was as carefully and accurately taken as possible, so that it represents true stock and values. Our inventory value increased $29,644.00 over value taken October 1, 1906.

In past years no amounts have been written off for depreciation of plant, machinery and buildings, the expenses for repairs and additions to plant having been considered as an offset for such depreciation. This year, however, we have decided to write off 5 per cent. for depreciation of the values of plant and buildings.

The control of supplies in stock at the mine lacked proper system. Now complete control over everything, and proper records of receipts and use of all supplies, are established, both as to issue and charge, the new system inaugurated better governing this most important item of our work.

The anticipated change from amalgamation to cyaniding, referred to in our last annual report, is not yet completely made, owing to our inability to get the needed machinery in time. Everything needed, however, is now on the ground or enroute, so that the change may be expected to be made early next year.

Expenditures for the cyanide machinery and advance supplies have necessarily been heavy; yet this expense will prove an economy by greatly reducing costs of treatment over our present methods.

Respectfully submitted,

ERNEST SCHERNIKOW,
Secretary.

REPORT

OF THE

NEW YORK & HONDURAS ROSARIO MINING COMPANY

NEW YORK, DECEMBER 1st, 1908

OFFICERS 1908-1909.

W. S. VALENTINE, *President.*
H. G. B. FISHER, *Vice-President.*
S. HEIDELSHEIMER, *2d Vice-Pres., & Treas.*
ERNEST SCHERNIKOW, *Secretary.*

BOARD OF DIRECTORS 1908-1909

H. H. BABCOCK,
L. L. CLARKE,
H. G. B. FISHER,
S. HEIDELSHEIMER,
FORREST H. PARKER,
MAXO SOTO.
F. J. SWORDS,
W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1908-1909

FORREST H. PARKER, *Chairman.*
L. L. CLARKE,
S HEIDELSHEIMER,
P. R. WEILER,
MAXO SOTO,

REPORT OF THE

New York & Honduras Rosario Mining Company

New York, December 16, 1908.

To the Stockholders:

The general showing in this year's annual report, whilst satisfactory from a dividend basis, is not as good as our work justified. The cause of this is the heavy decline in the price of silver, it having reached nearly the lowest price in its history; and whilst your Treasurer's figures compare well in the number of ounces extracted, this low price has caused a great shrinkage in net results. There is no specific reason given for this decline, and our hopes are that the coming year will show a greater demand and consequent increase in price.

We had hoped to pass this year free from the disturbances of Nature such as we have had for several years past; but, unfortunately, this was not to be. On October 20th, the heavy rains that fell for a number of days previous raised the streams to such an extent, that our works were in imminent danger; landslides of considerable magnitude covered some of our tunnels, and caused damage to machinery. Our first reports made us fear great losses, but later advices showed that the damage was not so serious, and the delay in work was only 90 hours. Our employees all showed great valor and good judgment in saving our property.

The dual management established last year was not successful, and in April, our Expert, F. H. Minard, Esq., E.M., visited the property and, amongst other recommendations, advised the acceptance of the resignation of the General Superintendent, leav-

ing the entire business in the hands of the General Agent. Several changes were made in the staff, and a general better feeling has prevailed since.

THE MINE.

. The reports hereto attached will show the work done during the year, and the footage covered is the largest in many years. Our ore reserves have materially increased, in spite of air difficulties, which prevented us from working some of our most promising territories.

Mr. Minard made a careful study of this, and reported to us the urgency of erecting an entirely new Air Compressor Plant, for which he sent us full plans and specifications. Orders were at once placed for the required machinery, and parts have already been shipped.

In this Plant we are attempting a more daring feat than ever before in our history. In our desire to have a most complete, powerful and modern Plant, we have not limited the manufactuers as to weights, and as a result we have some single pieces weighing 10,000 lbs; and to transport these pieces from the coast to the mine, we are having special wagons built.

In the near future, we also expect to have ten or twelve air drills running solely for development, with air to spare for liberal ventilation, and we believe that it will not be long ere we have large ore reserves.

Your attention is called to the fact that this large Plant, (which ere completion will have cost $150,000.00), besides many other improvements, will be built entirely out of our earnings and without encroaching on our reserve balance.

In anticipation of the extensive construction work and further plans for development, your Board of Directors considered it well to engage the services of F. H. Minard, Esq., E.M., for a prolonged period to take direct charge of the works. He sailed on October 31st, accompanied by a staff consisting of a Constructing Engineer, Electricians and Mechanics, and is now at the works.

THE MILL.

In March, the Mill was shut down for six days for the final cleaning up of the Amalgamating Plant and the treatment of the entire product by the Cyanide Process. This required many changes, but the results have fully met our expectations. The increase in the percentage of extraction, as shown by the General Agent's report, demonstrates that in the first six months we have saved the entire cost of the Cyanide Plant.

Recently we have installed another battery of five stamps, thus increasing our crushing capacity to 50 stamps.

ECONOMICS.

Our working charges in all departments have been materially reduced, as shown by the following table of totals:

	1908	1907
Mining, per ton (Silver)	18.84½	21.23
Tramway & Cleaning, per ton (Silver)	1.89½	1.98
Treatment, per ton (Silver)	11.20	13.83
Surface Dept., Per ton (Silver)	4.71½	5.16
	36.65½	42.20

Showing a reduction of 5.54½ per ton.

FINANCIAL.

Although we have spent large sums in improvements, new machinery, buildings, etc., all paid out of the profits, and have regularly paid monthly dividends, your Company has no outstanding liabilities, and the surplus of $1,248,988.45, as compared with $1,196,316.17, last year, shows a healthy condition.

POLITICAL.

Honduras has had a year of political quiet, and under the existing Government it is hoped that the revolutionary times are past. Our position with all the members of the Government is stronger than ever, and we have their fullest co-operation.

The Peace Conference of the five Central American Republics, held in Washington last December, under invitation, and with direct representation therein, of the United States and Mexico, seems to have had excellent results, and its treaties adhered to by all.

CREDIT.

Honduras has suffered the results of the financial trouble with the rest of the world; business has been at practically a stand still; nevertheless, our standing is fully as high as at any time in our history, and our drafts are sought after at all times.

Your Board and Officers desire to express their full appreciation to your General Agent, Chiefs of Departments and all employees, for the faithful and meritorious performance of their duties, to which we owe the fine condition with which we now begin the 28th year of our existence.

We herewith submit the reports of the General Agent, Mine Superintendent, Treasurer and Secretary, and the Audit of the Security Audit Co.

Respectfully submitted,

W. S. VALENTINE,
President.

Herewith are presented the most important facts as reported by the General Agent and Mine Superintendent.

San Juancito, November 11, 1908.

To the President,
New York,

DEAR SIR:—

ANNUAL REPORT.

As the fiscal year of your Company in Honduras closed on the 30th of September, and it is customary at the end of each year's work for your representative to present a general resumé of what has been done, we take pleasure in submitting to you herein a general report of the year's accomplishments.

MINE.

During the first seven months of the year, October 1st. to May 1st, development work in the Mine was, as you know, utterly inconsistent with what the low ore reserves given in the last annual report demanded and there was a gradual decline in the advance made each month until, in April, the lowest footage that has been made for a long time (580 ft.) was reached. Mr. F. H. Minard, E.M., having arrived on the property in April, immediately realized the seriousness of the situation and the recommendations he made for changing the administration of affairs at the Mine were, under your cable instructions, immediately carried out and Mr. A. R. Gordon, E.M., formerly Mine Foreman, was placed in charge thereof on May 1st, as Mine Superintendent. The invaluable suggestions and recommendations of Mr. Minard, for the energetic and systematic enlargement of the very vitals of your enterprise—the Mine—were immediately inaugurated and new life instilled into the work. The

following table of footage advanced each month during the year will, in a measure, explain the efficacy of the remedy applied.

1907	
October	1,012
November	929
December	717.5
1908	
January	737
February	644
March	687
April	580
May	1,090.5
June	1,355.5
July	1,500.5
August	1,585.5
September	1,634.5
	12,473 feet
Compared to previous year	10,675 "
An increase of	1,798 "

Although it will be seen by the above table that the development work was sadly neglected from October to May, the improvement that has been made in the last five months, which takes in almost two-thirds of the total was so great as to enable us to still show an increase over last year in the sum of the feet advanced. For detailed information as to the Mine Work we respectfully refer you to the report of the Mine Superintendent, which is sent you as a part hereof. His report gives his estimate of Ore Reserves (accompanied by Stope Maps showing where the ore is located) which are taken as of October 1st.

The Ore Reserves show a considerable improvement over the previous year, and, if the methods now employed for extracting the ore from the Mine are continued, the quantity in sight is sufficient to operate your Mill for one full year on a grade that will not be less than $29.00 (U. S. Currency) per ton. This grade will be but very little lower than the average grade milled last year; and, as development increases, which it will from now on, the possibilities are that ore will be encountered which will tend to raise this average.

The total mining costs for the year were 556,216.79 Pesos, or 18.84½ Pesos per ton crushed.

The work that has been accomplished by Mr. Gordon and his assistants since the first of May, is deserving of special mention, and, in passing, we wish to express our satisfaction with the hearty co-operation we have enjoyed from this department.

The total operating costs in the CLEANING PLANT AND TRAMWAY of your work during the past year amounted to 55,953.84 Pesos, or 1.89½ Pesos per ton crushed.

REDUCTION WORKS.

The work of the Mill is best described in the following statistics:

THEORETICAL VALUE OF ORE DELIVERED AT MILL.

Dry Tons Including Rosario Slimes	Average Grade Ozs. Ag.	Ozs. Au.	Total Ounces Ag.	Au.	Value in U. S. Currency Ag. @ 50c. oz. Au. @ $20. oz.
29,517.80	38.879	.554	1,147,626.60	16,375.075	$ 901,314.95

Production Ozs. Ag.	Ozs. Au.	Value in U. S. Currency Ag. @ 50c. oz. Au. @ $20. oz.	Percentages of Extraction as shown by these figures
978,070.67	14,643.570	$ 781,906.70	Average 86.75%
			Ag. " 85.22%
			Au. " 89.42%

The Production Consisted of	Tons	Ozs. Ag.	Ozs. Au.	Total Value U. S. Currency Ag. @ 50c. oz. Au. @ $20. oz.
Concentrates, 1st.....	308.94	177,288.52	2,791.171	$ 144,467.68
" 2nd.....	44.374	21,649.87	259.147	16,(07.86
Precipitates.....	31.3877	656,655.93	9,194.182	512,211.59
Bullion (76 Bars).....	.....	122,476.35	2,399.070	109,219.57
		$ 978,070.67	$ 14,643.570	$ 781,906.70

	Ozs. Ag.	Ozs. Au.	Total Value U. S. Currency
Forwarded	978,070.67	14,643.570	$ 781,906.70
in addition to the above there was 1 Bar Bullion, the result of "River Washing", containing..	379.56	40.575	1,001.28
	978,450.23	14,684.145	$ 782,907.98
Compared with production of last year.....	923,538.46	11,950.360	700,776.43
Showing an increase of	54,911.77	2,733.785	$82,131.55

We do not go into detail herein as regards the working costs of the Reduction Works, and as the working accounts were entirely changed in April, then again in May, it is only possible to make comparisons in so far as the average cost per ton for the three periods are concerned. In other words, the average cost per dry ton crushed during the months October 1st, 1907, to April 1st, 1908, was 12.73 Pesos; for the month of April it was 10.03 Pesos and for the months from May 1st, to October 1st, it was 9.62 Pesos. During the first seven months "Freight on Product" is included in the Milling costs, but from May 1st, to October 1st, it was transferred from the Milling costs to the Surface Sheet. The total cost for the entire year was 330,592.05 Pesos, or 11.20 Pesos per ton crushed.

In our report of last year we described what had been done towards the construction of "Cyanide Extension." After delays in the arrival of machinery and some alterations in the original ideas, everything was ready for the shut-down of the Mill to make the final changes on the 7th of March, and the Batteries were hung up on March 8th. It required 18 hours to complete the treatment of the remaining Battery Product on the Wilfley Tables and in the Amalgamating Pans before a complete shut-down was effected and the work of making the changes was only begun at 1 P. M. on March 9th. In addition to making the required installations and connections for treating all the ore by Cyanide, all the changes were completed in 144 hours, and at 11 A. M., on March 15th, the Mill started again on a period of work that, as far as extraction of values is concerned on your property, has never before been equalled. A glance at the percentages of extraction for the past year, which are given in the statement preceding, will show what a great improvement has been made in the direction of extraction, and from figures that we have taken from the records on file here in this office we find that from October 1st, 1906 to March 1st, 1908, a period of 17 months just antedating the change in the process, only 80.02% of the values which the records show were contained in the ore treated during that epoch, were recovered.

Compare this with the average of the extraction which has been obtained beginning with the month of April of this year and it is indeed very clear that since the entire product of your Mines has been treated with Cyanide the increase in extraction is 12.56%. Permit us to point out here that the percentage of extraction for April is abnormal, because in the product is included $1,847.50 which was the value of the 2 bars of Bullion recovered from clean-up of Amalgamating Pans after Amalgamation was discontinued, and this, of course, increased the percentage of extraction for that month. The actual extraction of the ore treated during April was 93.38%, which is the figure that we take in obtaining the increase of 12.56% mentioned above.

To enable you to better realize what this increase in extraction means, a comparison in the term of dollars and cents will undoubtedly prove interesting. The values contained in the ore as it entered the Batteries during the six months, April 1st, to October 1st, 1908 (figuring silver at 50 cents per oz. and gold at $20.00 per oz., which is the basis for all our calculations of product), amounted to $452,390.35, U. S. currency, and of this there were recovered $418,828.02, U. S. currency. Under the old system of treatment, and assuming that the average extraction which was obtained during the months from October 1st, 1906, to March 1st, 1908, would have prevailed, all that would have been recovered from this Battery Head value would have been $362,002.75, U. S. currency. It is readily recognized thereby that by the new method we have recovered in 6 months $56,825.27, U. S. currency, more than would have been recovered by the old systems. It is well to remark also that the percentage of extraction for the months from April 1st to October 1st, 1908, is not a fictitious one, but is checked by the daily tailings to the river within 2%, while we personally know that during the period from October 1st, 1906, to March 1st, 1908, there were months when the assays of the daily tailings to the river did not check within 20% of what the extraction was figured at the end of these months.

There is still an appreciable saving in the Milling expense.

During the year 1906-1907 the Milling cost per ton crushed, as shown in last year's report, was 13.83 Pesos. During the first 6 months of this year—October 1st to April 1st (under the old processes) the Milling cost was 12.73 Pesos per ton. From April 1st to October 1st, 1908, the six complete months during which the new process has been used, the Milling cost was 9.90 Pesos per ton. (This latter amount does not agree with the figures shown on the Mill Statements, because these statements for the months of April 1st to October 1st, do not include "Freight on Product" while the previous months do, and for the sake of comparison we have added this expense to the last period also.) Therefore, it will be seen that in working costs under the new treatment a saving of 2.83 Pesos per ton has been effected, which, on 14,889.34 tons crushed, amounts to 42,136.83 Pesos, or @ 230%, $18,320. U. S. currency, in 6 months. To demonstrate the advantages of the all-cyanide treatment over the old methods, it is only necessary to say that your entire expense for transforming your plant into a slimes-filter-press cyanide plant, was 172,159.04 Pesos, which, at 230%, equals $74,852. U. S. currency. (This amount includes everything in connection with the change) and the saving you have made in working cost and increased extraction in the short period of six months, as we have mentioned above, amounts to $75,145. U. S. currency or more than the entire expenditure.

As far as the quantity of ore crushed during the year is concerned, there is only one year in the history of your Mine which has surpassed it, and you were only prevented from equalling that record by the shut-down necessary to make the changes referred to above, and difficulties encountered by the addition of lime to the ore (for neutralizing the acids and aiding settlement) before entering the Batteries. The lime corroded the screens, retarded the flow of solution and reduced the capacity of the Batteries about 10%. This difficulty was overcome, however, in October and increased tonnage can be expected henceforth.

This entire branch of your works has been kept in good repair during the entire year. Up to the first of May, the Mill

and Cyanide Plants were operated as two distinct plants, each with its Superintendent, but during the last five months the two have been consolidated.

In the month of October of this year (1908) one of the old leaky Battery Mortars was replaced by a new solid mortar. A new complete Battery was installed and started operating on the 6th of November, which should increase the product at least 10%. Two more new Mortars are on the road from the coast to the Mine and will replace other leaky ones just as soon as they arrive. Then it is intended to put new side plates into the old mortars taken out and generally overhaul them and replace the balance of our leaky mortars with the repaired ones.

At this writing the prospects of a record run of the Mill during the year already commenced are most encouraging, because with the difficulties encountered with lime in the Batteries being overcome and almost 11 months of the year ahead of us with 50 stamps instead of 45 as previously, our tonnage per month should average somewhere between 2,700 and 3,000 tons.

SURFACE DEPARTMENT.

This is the remaining branch of your business, which takes in all expenditures that are not directly applicable to Mining and Milling. Its sub-headings are depicted clearly in the statements herewith, showing the cost of each during the entire year. The total is 139,223.03 Pesos, or 4.71½ Pesos per ton crushed.

A recapitulation of the total costs of each department for the year shows the following:

	Total cost pesos	Per Ton crushed
Mine Department	556,216.79	18.84½
Tramway and Cleaning Plant	55,953.84	1.89½
Mill Department	330,592.05	11.20
Surface Department	139,223.03	4.71½
	1,081,985.71	36.65½
As compared to the previous year	1,176,999.58	42.20
A DECREASE OF	95,013.87	5.54½

FREIGHTING.

The freighting problem has been handled quite successfully and, notwithstanding that the freighters are obliged to return

empty to the coast whereas formerly they had Concentrates to carry back, we have been able to handle all the freights of the year at an average of 79.61 Pesos per ton as against 89.77 Pesos per ton during the previous year. This includes all charges from ship's arrival at Amapala to delivery at destination in San Juancito. The figures alone do not show what a saving has been made, because we have had to bring up considerable more cart freight this year than last and the cart freight cost almost twice as much per ton as mule freight.

FINANCIAL.

Notwithstanding a period of financial depression in this country, which has not been equalled for a long time past, the Company's drafts have met with prompt sale and the rate of exchange which has been obtained during the year has been on a par with the equivalent of silver at market quotation.

GENERAL.

In last year's report considerable was said regarding economy in the work, and the record of the year just ended which shows that the production exceeded the previous year by 1,419.80 dry tons of ore crushed and 54,911.77 ozs. Ag. and 2,733. ozs. Au. produced at a decrease in working expenses of 95,013.87 Pesos, clearly demonstrates that something has been done in this direction. Moreover in the Mine the total advance in development was 1,798 feet more than in the previous year, and from the monthly advance tabulated under "Mine" you will observe that almost two-thirds of the total development this year was accomplished in the last five months. The increased Mine work has shown for itself in the greater amount of "Ore Reserves" which the Mine Superintendent gives in his report, and in addition to this it is to be remembered that there is almost a complete month's supply of Ore for the Mill broken in the Stopes and Chutes, ready to be trammed to the Surface and sent to the Mill, upon which all the MINING expense has already been paid.

Mr. Gordon, the Mine Superintendent, informs us that from a careful study which he has made of all the workings accessible at the present time—old and new—he is led to believe that there are many thousands of tons of Ore, of a grade that will average between $15.00 and $20.00 (Gold) per ton delivered at the Mill, which, if determined systematically and accurately and could be shown up by measurements and assays, would lead the Company to consider very seriously the erection of a modern Mill, of a capacity that would make the treatment of this grade of ore a very profitable one. With the Mine Staff that we have at present there is only sufficient to take care of the routine work and Mr. Gordon suggests that if the Company will send two Surveyors and one Mine Sampler, whom he can place entirely on this work, he firmly believes that he will be able to make a very interesting report within 8 to 10 months time. Our opinion is that the extra expense needed to find out exactly what the old stopes and drifts contain is one well worth making, because it will not only give you a complete record of your Mine (which the work is interfered with greatly by not having now), but there is every indication that this work will show up such a large amount of low grade ore as to be astounding, and we strongly recommend that the men Mr. Gordon would like to have for this purpose be sent.

In all branches of your business, methods have been inaugurated which have tended toward lower working costs and, in the keeping of supplies, which is practically the hub of all your operations, a great improvement has been made. The old storehouse which had stood for we don't know how many years, was in a collapsible condition, owing to all the timbers having decayed.

This we have torn down and put up a new 2-story and basement storehouse, 105 ft. long x 36 ft. wide, which is now being filled up with all the supplies required at the lower works (excepting Cyanide which is kept in a separate storehouse at the Cyanide Plant for convenience) with a place for everything and everything in its place. This certainly is not a luxury, but an absolute necessity, and the expense which the erection of this

building entailed—slightly under 10,000 Pesos—never was felt in the working expenses to which it was charged, and we are confident it will pay for itself in less than a year's time.

In the keeping of your supplies at the Mine and other branches of the Upper Works a material improvement has also been made and the systems inaugurated will insure the correct account of all supplies received on the property and what disposition is made of them. The importance of this is readily understood when it is realized that over one-third of your working expense is made up of supplies.

Even now there are still systems to be inaugurated which will be further conducive to economies in the working expenses, and such will be applied as quickly as it is possible to do so.

It has been necessary to expend a large amount of money in repairs to buildings and other portions of your property as, owing to the erection of "Cyanide Extension" which occupied all the Carpenters, all the Masons and the greater part of the laborers for more than a year, all repairs that were not absolutely necessary for the actual turning out of product were allowed to pass by and the working expenses for the months from May to October have had to bear the burden of what should have been spread out over a period of eighteen months.

The Flume Lines have also been a source of considerable expense, both in labor and lumber, and we deem it necessary to remark that the Flume Line which conveys water to the Mill Penstock, as also the Flume Line which supplies the water for Washington Plant, have both almost served their period of usefulness and it appears to us that steps will have to be taken to replace both of these within the next year or two. Since these two sources of water will undoubtedly have to be depended upon as long as the work is carried on, we are led to believe that it would be advantageous and economical to construct both these flumes of sheet iron "Casing," because the old pipe which was formerly used to convey water from "Aguacatal" to "Higuerillas" in former years, which we understand was installed some 18 or 20 years ago (possibly more) is evidence of the fact of its

durability as compared to wooden flumes, as the wooden flume which conveys water to the Washington Plant has only given service for less than 5 years and already is in need of replacement while the pipe line would still be serviceable had it not been abandoned some few years ago when the Compressor Plant was removed from "Higuerillas" to "Peña Blanca." It also appears to us that the use of iron pipe would prevent many shut-downs of your plant in the rainy season as the land slides which we are subjected to here at such times come down on the wooden flumes, fill them up and carry them away, whereas with an iron pipe the tendency would be to come down and pass over the pipe, which would offer practically no resistance and the pipe would not be damaged in any way. The installation of Pipe Lines for both these sources of water would undoubtedly be somewhat more expensive than wooden flumes, but the less attention they would require and the longer service they would give would, it seems to us, be the most profitable installation in the end. Moreover, a pipe line could be installed without interfering with the Mill, while the replacing of the present flumes with new wooden ones would probably mean a prolonged shut-down.

In the third week of October we were visited with heavy rains, which caused serious landslides in all parts of the property, covering up the Peña Blanca Compressor Station, carrying away portions of the flume lines which caused a complete stoppage of the Mill and Cyanide Plant for 90 hours, blockading the roads so that there was no communication between here and Tegucigalpa for several days and raising the river to such a height as to undermine all the foundations on its front from the Mill to the Cyanide Plant. The danger to the Tube Mills in the former and the Zinc Room and Barren Solution Masonry Tank in the latter was so great as to cause us untold worry, but by freaks of good fortune in the form of natural "breakwaters" deposited by the flood, the foundations that showed such grave signs of crumbling up and sliding into the current were saved. As we have advised you in cables and letters on this subject, the Mill was started after 90 hours of idleness, but the damage at the

Compressor Station was far the worse and the Compressor only resumed its work after two weeks. The new 200 K. W. Generator which was shipped to increase the capacity of "Washington Plant" and which reached here in October, is already installed and only lacks the proper belt to enable us to use it in the manner desired.

In conclusion permit us to say that, while the first month of the new year has been fraught with many discouraging features, the prospects of the year before us are, we consider, far brighter than they have been for a long time past, and, with greater ore reserves than last year, greater milling capacity than ever and a staff of men in all departments who are most conscientious and hardworking—in fact we consider the right men in the right places—we firmly believe that the final results of this new year will prove far more profitable than any of the previous years in the history of your Mine.

We take this opportunity of expressing to the Officers and Board of Directors our deep appreciation of the hearty co-operation extended to us in the prompt despatch of all materials requested and the unlimited means provided us for the entire working of the property.

Respectfully submitted,

JOS. M. DE HART,

General Agent.

San Juancito, November 10, 1908.

To the General Agent,
San Juancito.

DEAR SIR:—

Complying with your request for a recapitulation of the work done at the Mine during the year October 1st, 1907, to October 1st, 1908, I take pleasure in submitting to you the following:

ORE EXTRACTED.

The ore extracted during the year consisted of, approximately, 30,241.2 tons, the following table giving the cars which are figured to contain about .58 tons per car:

	Cars	Tons
Totals	52,141	30,241.2

RESUMÉ OF FOOTAGE FOR YEAR.

Headings	8,489.5
Raises	2,313.0
Cross-cuts	1,456.5
Connecting Raises	214.
Total footage for year	12,473.

ORE RESERVES.

Before accepting the following figures on ore reserves, it must be thoroughly understood that the ore blocked out, especially in the "Candelaria" vein, must be taken out by mining methods now in vogue and that the poor ore must be blended with the rich in order to bring the whole to a uniform product. We take 13 cubic feet per ton for vein matter in place, against 11 and 12 cubic feet per ton used in former years. Methods of sampling,

etc., are discussed under the heading of "Engineering and Sampling."

The ore, of course, will not occur and be extracted according to the boundaries of the various blocks; they are merely drawn in to indicate, approximately, the vicinity of the quantity of ore calculated.

Although the calculation for "Ore delivered at Mill" averages $31.35, we believe this is a little too high. It should average, however, about $29.00.

Ore proved on 4 sides	Tons	1,765.
Ore proved on 3 sides	"	6,965.
Ore proved on 2 sides	"	11,319.
Ore proved on 1 side	"	8,625.
Total value of ore		$1,066,398.84
With an average value per ton at Mill		31.35
Percentage of waste mined with ore		19%
Total number of tons (Vein matter)		28,674.
Total number of tons (including waste)		34,005.45

NEW VEINS.

The development of late years has mostly been devoted to drifts and raises in various veins, and but little cross-cutting was done to locate new veins or a new vein system, such as is now supplying a greater portion of the ore. To safeguard the future of your Mine against a time when the present vein system begins to near exhaustion we are running a series of crosscuts in virgin territory to locate new veins, or systems of veins, and have already had some success in this direction.

SURFACE PROSPECTING.

We have had numerous prospectors in the mountains and several veins have been located. One of these veins is about five feet wide, but, as yet, has practically no values. Work is being done in it with the hope that values will come in soon.

Outside of the new veins found much valuable information has been obtained as to the mineral bearing zones.

ENGINEERING AND SAMPLING.

This has practically been the first year that we have had an Engineering and Sampling Department whose work has been placed on record for continuous and ready reference.

The engineering staff, which is composed of one chief engineer, two assistant engineers and one sampler, is well organized and capable, and the engineering equipment at its disposal will compare favorably with that of any large, well-organized mine.

A small portion of the class of work turned out by this department is submitted for your inspection in the form of stope maps on which the ore reserves are indicated.

The samples were taken every five feet throughout and from wall to wall, and any waste less than half a foot in width occurring in the vein itself has been included in the sample as this waste must be mined with the vein; this method of sampling gives much lower values throughout, but the average approaches, more closely, the true value of the vein. If a certain allowance be made for other waste which is bound to be broken with the ore and the corresponding deductions in value per ton made, our experience during the past five months has shown that this will about be the value of the ore as delivered to the Mill.

All averages of sample values are calculated by the foot ounce method.

We believe that you are fully aware of the value and importance of the information which maps of this nature give and that you will insist upon their continuance.

The workings of the whole mine are gradually being resurveyed and tied to a primary triangulation system and the results plotted by co-ordination on a scale of 1 in. equals 60 ft. The record of these calculations, when not in use, is kept in a fireproof safe, as these calculations are the only data for the maps.

In the near future we will endeavor to sufficiently extend our triangulation system so as to embrace all the boundaries of the various concessions constituting the property. There are, at present, no sufficiently accurate or comprehensive maps showing the relative positions of the boundaries.

STOPING AND STOPE PROSPECTING METHODS.

During the past year appreciable strides have been made in bringing the mine stoping and tramming operations on a more economical basis. How well we have succeeded you will be able to judge by comparing this year's mine costs with those of last year.

The new stoping and stope prospecting methods have been the means of giving the mine a longer life. Usually, when ore in a stope got too poor to warrant shipment to the Mill it was abandoned. Stopes of this nature are still accessible in the newer workings especially in the "Candelaria" vein.

The stope prospecting method entails the workings of a poor stope *uniformly throughout its length* AND sending as much of the poor ore to the Mill as the Battery Heads will allow; the remainder is stored in the stope itself, or in some convenient chute until such time as it can be mixed with a higher grade to bring it up to the required value. Fully 30% of the old stopes which we have worked in this manner have come into pay values again and have produced thousands of tons of ore and promise to do so in the future. This method, however, is not applicable in every case and its use is governed mainly by the character of the vein in which the stope may occur. Some of the old stopes which have come into values again are the Upper 250 Candelaria Stope No. 1 and Upper 350 Candelaria Stope No. 2.

Wherever practicable, the underhand, inverted step method of stoping has been introduced, as we find that we are able to break, in some cases, as high as 250% more ore with the same number of miners as were employed with the methods used before.

MINE CONTRACTS.

Some very radical changes were made four months ago regarding the method of letting mine contracts, with the result that the cost per lineal foot in drifts, crosscuts and raises has decreased nearly 4. Pesos per foot. As we are doing about 1,600 ft. of development every month it will be seen that this is a very important item.

HAULAGE.

Nearly a mile of wooden track has been replaced by 16 lb. steel rails and nearly another mile replaced in places from which it was taken during the shortage of rails last April and May.

Stretches of track which formerly required two carboys to a car have been rebuilt so that now only one carboy is needed. It is estimated that over 100,000 cars of ore and waste were handled underground during the year by hand power alone.

The Rosario Locomotives conveying ore and waste from the main chutes on the Lower 650 ft., or Rosario Level, have rendered very satisfactory service throughout the year and handled, for a distance of over 6,000 feet, 44,349 cars of ore and 28,601 cars of waste.

In the early part of August, former ore chute No. 49 was recovered and put into commission as a waste chute. This chute caved some years ago between the Lower 400 ft. and Lower 650 ft. Levels and after several attempts to recover it had failed, it was finally abandoned. This chute extends from the Upper 700 ft. Level down to the Lower 650 ft. Level and now handles the dirt of the entire mine. This dirt is hauled to the surface by the electric locomotives. Since this chute has handled all the dirt we have been able to cut tramming expenses on the most important level, the Upper 150 ft., almost in two and to start several new headings as the tramming distance has been decreased by about 3,000 feet. Since this chute also handles waste from the Zero, Lower 100 ft., Lower 200 ft., Lower 300 ft., and Lower 400 ft. Levels, we can discontinue using Chute No. 52 and thus also discontinue the constant and expensive timbering required when this chute is in use.

We are, of course, not absolutely sure that Chute No. 49 is recovered for all time, because a portion of it is in very soft rock, but we do not look for any serious trouble.

MINE TIMBER.

The constant demand for mine timber has required the extension of our present timber roads, and about two miles were

added thereto this year. The hauling distance increases materially each succeeding year and as about 60% of the total cost is for hauling, the cost of mine timber will begin to enter as a serious item in the future.

We recommend that you communicate with the U. S. Forestry Department regarding a specie of Eucalyptus which is suitable for underground purposes, and that you send us the seeds, which we will plant in the vicinity of the various mine portals.

STOREHOUSE.

During the last six months a branch storehouse was established at the mine. No materials from this storehouse can be obtained without a properly signed order, and all materials consumed are daily reported to the General storehouse in San Juancito.

GENERAL REMARKS.

The vigorous development started six months ago will be continued and we are sure will bring results. More crosscuts will be started to penetrate virgin territory.

The serious problem which will confront us should be materially increase development on some of the levels will be the handling of the dirt, as the haulage distances to the present waste chutes are quite long. One solution of this problem would be to cut new waste chutes near the present workings. When development with air drills begins it will become necessary to install an electric haulage system on the Peña Blanca (Upper 150 ft. Level) which will take care of all waste from and above this level. All waste below the Peña Blanca Level can be handled by the Rosario Locomotive.

Early in March the connection between the Colonia and the Rosario Mine was successfully completed. The Lower 300 ft. Level of the Rosario mine connects with the Lower 100 ft. Level of the Colonia by an inclined raise 110 feet in length. This raise acts as a general ore chute and ladder way between the two mines and has handled, since it was put into commis-

sion 3,648 cars of ore. It was necessary to cut the grade of the Lower 100 ft. Level down to Zero in order to facilitate the handling of cars.

Mr. H. F. Lefevre's figures for the amount of ore in sight are taken as a basis, from which we deduct the number of tons extracted up to date. Mr. Lefevre estimated 5,300 tons; we have extracted since then 2,244 tons leaving 3,056 tons. The advancement of the various stopes has probably developed an additional 1,000 tons and the amount reported here as available ore reserve is taken at 4,000 tons.

The percentage of waste mined with the ore from different veins varies greatly, as will be seen from the ore reserve sheet. These percentages, however, are based upon our experience with the ore, so are fairly accurate.

More has been done this year towards recovering old workings than ever before in the history of the Mine. Some ore has been found in the old Rosario workings, also some in the Northwest Vein, but as has been mentioned before, our present engineering staff is just large enough to keep up the daily work, consequently any work towards mapping and sampling old workings will proceed but slowly.

The Candelaria vein has not as yet cut the Rosario, although we looked for it to do so a month ago. Veins in this Mine rarely cross each other, so when the junction is reached development in the Candelaria will then be limited to a vertical direction only. On the other hand, should the veins cross each other, there would then remain, roughly, about 700 feet to drive on before the surface was reached. We believe that the region above, and in the vicinity of, the Upper 350 Candelaria Stope No. 2, and Upper 350 Candelaria Raises Nos. 2 and 3 will produce ore; rapid development of this region is retarded by an excessive amount of water which interferes with the work.

In conclusion we might say that the Mine is in better condition than it was a year ago, and we believe that the plans now being prosecuted for greater development will materially increase the value of your properties.

Respectfully submitted,

A. R. GORDON, E.M., Mine Superintendent.

New York, December 1, 1908.

To the President & Board of Directors of the
New York & Honduras Rosario Mining Co:

GENTLEMEN :—

The financial report presented this year shows a decided advance in our work when compared with former years. Unfortunately, the great decline in the price of silver nullifies our own result; yet, our total product value is practically the same as last year. As a comparison of ounce production, the following figures speak for themselves.

In 1907, we produced a total of 923,538 ounces of silver and 11,950 ounces of gold, and this year our production was 1,002,780 ozs. of silver and 14,483 ozs. of gold, an increase of 79,242 ozs. of silver, and 2,533 ozs. of gold.

Had the price of silver maintained, it is evident what the value of our production would have been even at the lowest price of last year, 54c. an ounce. Now the price of silver is in the neighborhood of 49c. (recently we had some settlements as low as 47⅞c.), this shrinkage alone representing a difference of at least four dividends; but in spite of these pessimistic figures, our financial standing is good. We have paid twelve dividends, amounting to $180,000.00; have spent large sums for new machinery and betterments, our cash being $229,674, and surplus $1,248,988.45. And, better than all, the physical condition of your property at the beginning of this fiscal year is much more satisfactory, in fact, far more so than for many years past, and augurs well for a most prosperous year.

The report of the Security Audit Company is hereto attached, as also the statement of production and dividends since the beginning.

Respectfully submitted,

S. HEIDELSHEIMER,

Treasurer.

THE SECURITY AUDIT COMPANY OF NEW YORK.

New York, December 12, 1908.

To the President and Board of Directors of
New York & Honduras Rosario Mining Company,
New York, N. Y.

GENTLEMEN:—

In compliance with your instructions, we have audited the books of account of your corporation, kept at its office in this city, for the fiscal year from December 1st, 1907 to November 30th, 1908, and certify that, subject to the valuation of the inventories and to verification of the cash assets at the mines, the same are correct and in accordance with the *Balance Sheet, Profit and Loss Statement and Surplus Account,* annexed hereto and forming part of this report.

Similar to the method previously employed, the inventories were taken at the mines on October 1st, 1908, and the operating expenses cover the year ended September 30, 1908, and not the fiscal year under review, excepting New York expenses.

Respectfully submitted,

THE SECURITY AUDIT CO. OF N. Y.

GEO. WEAVER,

Treasurer.

NEW YORK & HONDURAS ROSARIO MINING COMPANY, NEW YORK.

Balance Sheet, November 30, 1908.

ASSETS:		
Cash in Bank and on hand in New York	$ 39,435.60	
Bills and Accounts Receivable	4,352.50	
Superintendent's Account in Honduras	101,848.76	$101,848.76
New York City Bonds, 1911, at par	50,000.00	
Loan to the Government of Honduras	27,000.00	
Bullion and Concentrates	116,636.54	
Ores, Slimes, &c.	70,424.00	
Supplies	190,202.55	
	$ 599,899.95	
Mines, Real Estate, other than buildings, concessions, &c.	1,685,179.00	
Tramway and Gravity Road	24,700.00	
Buildings	38,789.00	
Machine Shop	24,557.00	
Mill Machinery	237,283.00	
New Power Plant	94,600.00	
Guadalupe Power Plant	23,394.08	
Transportation Outfit	4,895.00	
Surveyor's Implements	1,240.00	
Property at Agencies	17,970.00	
Live Stock	2,811.00	
Office Furniture in New York	1,230.00	
LIABILITIES:		
Acceptances, Notes and Accounts Payable		$ 7,559.58
Capital Stock		1,500,000.00
Surplus Account		1,248,988.45
	$2,756,548.03	$2,756,548.03

NEW YORK & HONDURAS ROSARIO MINING COMPANY, NEW YORK.

Profit and Loss Account for Fiscal Year ended November 30, 1908.

To Bullion and Concentrates on hand or in transit December 1, 1907	$162,300.00	
" Ore, etc., on hand October 1, 1907	24,803.00	
By Bullion and Concentrates sold during the fiscal year		$834,573.69
" Bullion and Concentrates on hand or in transit November 30, 1908		116,636.54
" Ore, etc., on hand October 1, 1908		70,424.00
To Operating Expenses (See remarks in Report)	540,238.88	
" Balance, Gross Profit	294,292.35	
	$1,021,634.23	$1,021,634.23
By Balance, brought down		$294,292.35
" Interest on Bonds		1,500.00
To Office Rent	$ 2,325.08	
" Salaries	17,169.01	
" Directors' Meetings	4,044.00	
" Stationery	194.61	
" Postage	338.70	
" Cables & Telegrams	353.38	
" Taxes	291.71	
" Legal Expenses	25.00	
" Interest on Loans	1,328.63	
" Honduras Examination	5,600.03	
" Laboratory Expense and Outfit written off	722.97	
" Miscellaneous Expense	2,229.95	
	$34,623.07	
" Net Profit for year	261,169.28	
	$295,792.35	$295,792.35

NEW YORK & HONDURAS ROSARIO MINING COMPANY, NEW YORK.

Surplus Account, November 30, 1908.

By Balance, December 1, 1907			$1,196,316.17
To Charged off, 5% on Machinery, Power Plant, &c		$ 23,497.00	
To Dividends paid:			
Dec. 20, 1907	$15,000.00		
Jan. 24, 1908	15,000.00		
Feb. 21, 1908	15,000.00		
Mar. 20, 1908	15,000.00		
Apr. 30, 1908	15,000.00		
May 29, 1908	15,000.00		
June 26, 1908	15,000.00		
July 24, 1908	15,000.00		
Aug. 21, 1908	15,000.00		
Sept. 18, 1908	15,000.00		
Oct. 23, 1908	15,000.00		
Nov. 20, 1908	15,000.00	180,000.00	
By Net Profit for year ended November 30, 1908			261,169.28
To Account, written off as per instruction of Board of Directors		5,000.00	
" Balance, November 30, 1908		1,248,988.45	
		$1,457,485.45	$1,457,485.45
By Balance, December 1, 1908			$1,248,988.45

ANNEX.

The following amounts are made up to November 30, in each fiscal year:

Bullion Production.		Dividends.	
1882	$2,452.27		
1883	12,900.42		
1884	149,741.39		
1885	244,444.70		
1886	224,157.58		
1887	613,446.05	1887 No. 1	$37,500
1888	767,632.15	1888 Nos. 2 to 5	60,000
1889	590,189.55	1889 Nos. 6 to 14	150,000
1890	113.28		
1891	369,587.19	1891 Nos. 15 to 16	30,000
1892	614,498.67	1892 Nos. 17 to 21	165,000
1893	492,534.87	1893 Nos. 22 to 25	150,000
1894	392,485.92	1894 No. 26	37,500
1895	158,164.42		
1896	449,525.88	1896 Nos. 27 to 28	30,000
1897	568,872.06	1897 Nos. 29 to 40	180,000
1898	611,467.76	1898 Nos. 41 to 48	120,000
1899	798,994.77	1899 Nos. 49 to 60	180,000
1900	827,443.12	1900 Nos. 61 to 75	225,000
1901	780,760.18	1901 Nos. 76 to 93	300,000
1902	490,273.34	1902 Nos. 94 to 100	105,000
1903	436,818.29	1903 No. 101	15,000
1904	721,374.87	1904 Nos. 102 to 108	105,000
1905	993,065.39	1905 Nos. 109 to 121	180,000
1906	1,112,171.69	1906 Nos. 122 to 139	285,000
1907	791,347.62	1907 Nos. 140 to 153	210,000
1908	788,910.23	1908 Nos. 154 to 165	180,000
Total	$14,003,373.66	Total	$2,745,000

SECRETARY'S REPORT

New York, December 1, 1908.

To the President and Board of Directors of the
New York & Honduras Rosario Mining Company,

GENTLEMEN :—

In the foregoing reports are given the records of our work during the fiscal year ending November 30th, 1908.

The Inventory of all property in Honduras other than Mining Property was carefully made as of October 1st, 1908, and shows an increase over a year ago of $11,864.14. This, under ordinary conditions, would have been greater, but due to closer methods in purchasing supplies than prevailed heretofore, and more accuracy in determining values, we believe we have firmer figures of valuation than formerly.

A perusal of the comparative working costs will show the strides made in the direction of better net results, and also the great advantages now derived from working ores by the straight Cyanide method.

Up to this time there has been expended in New York $23,394.08 for machinery, plant and freights, towards the New Guadalupe Power Air Compressor Plant, referred to in the President's Report, and a further sum of $31,000.00 has been set aside to pay for that part of the plant still to be shipped from New York, all of which has been taken from your reserve funds.

Respectfully submitted,

ERNEST SCHERNIKOW,
Secretary.

REPORT

OF THE

NEW YORK & HONDURAS ROSARIO MINING COMPANY

NEW YORK, DECEMBER 1st, 1909

OFFICERS 1909-1910.

W. S. VALENTINE, *President.*
H. G. B. FISHER, *Vice-President.*
E. J. SWORDS, *2nd Vice President.*
S. HEIDELSHEIMER, *Treasurer.*
ERNEST SCHERNIKOW, *Secretary.*

BOARD OF DIRECTORS 1909-1910.

H. H. BABCOCK,
L. L. CLARKE,
H. G. B. FISHER,
S. HEIDELSHEIMER,
FORREST H. PARKER,
MAXº SOTO,
E. J. SWORDS,
W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1909-1910.

FORREST H. PARKER, *Chairman.*
L. L. CLARKE,
E. J. SWORDS,
P. R. WEILER,
MAXº SOTO.

REPORT OF THE

New York & Honduras Rosario Mining Company

New York, December 1st, 1909.

To the Stockholders:

In presenting this Annual Report for your information and consideration, we feel that we have cause for congratulation, although our production and consequent dividends have not been as large as in former years. This in great part has been due to the large sums expended in new machinery and improvements.

In December of last year, your President again visited the property, and returned in May, having taken up many matters of urgent necessity with the representatives of the Company.

As heretofore reported, F. H. Minard, Esq., E. M., our Consulting Engineer, with a competent staff, left for the Mines to erect a new Hydro Electric Air Plant that had recently been shipped, and to consult on such other matters as the necessity required. Mr. Minard returned to New York in October, and we append excerpts from his report herewith.

Mr. J. M. DeHart, our General Agent, was given a well merited vacation in July. During his absence, Mr. L. F. Valentine, Superintendent of General Work, was appointed to act as General Agent, and his report, together with the report of Mr. A. R. Gordon, E. M., the Superintendent of Mines, is hereby appended. Mr. DeHart again assumed the General Agency on November 19th.

GENERAL REPORT.

The various reports hereto attached are so replete in detail, that we touch only slightly on the most material points.

THE MINE.

The reports herewith give full details of the work done and progress made in development and ore extraction. It will be noted that a greater field has been explored than in any previous years, and the result thereof has been more than satisfactory, inasmuch as the new veins opened augur well for the lasting future of our property.

For many years we have had a very large tonnage of ore of low grade in the older workings of the mine, which practically had been abandoned. A special force of engineers and employes was put on the recovery of this ore by systematic examination, and the mine reports show that a very large profit will be extracted therefrom.

THE MILL.

The Stamp Mill is in poor condition. It was erected in 1884, *destroyed by fire in November,* 1885, *and rebuilt early in* 1886. *Additions thereto have been made from time to time. The repairs that have been made have practically constituted its rebuilding many times over, and it is now in very poor condition and antiquated. During the last year no more expense than absolutely necessary was made for the continuous running, as the plan, contemplated some years ago of a new, larger and modern mill, is now near realization.*

NEW MILL.

Our Consulting Engineer has made a specific study of erecting such a mill, with a capacity for treating not less than 200 *tons per diem. He has laid before us all the data necessary, and steps have already been taken to begin work actively, and we hope to see same complete and in operation before December,* 1911.

This plant will not only more than double our present capacity, but will greatly economize in fixed charges and expenses. It will be erected near the mouth of the mine, thus ridding us forever of one of our most annoying and useless expenses; that is, the cable tramway, which has been a source of trouble and uncertainty in delivery of ore to the mill. Furthermore, we plan to consolidate all of our departments at the new site, thus eliminating double expense in many parts of our business. As a matter of fact, we expect to revolutionize the entire "make-up" of our business to such an extent, that it will permanently redound in favor of greater profits.

This plant will cost approximately $200,000.00. *Your Board of Directors has given much thought to this question, and it is desired to call special attention of the stockholders to this most important matter. In various Annual Reports it has been shown that extensive improvements have been made, large sums of money expended on them, and all done directly within the profits, whilst always maintaining a conservative reserve, and with few exceptions declaring regular monthly dividends. Your Company has never issued bonds, preferred stock or liens of any nature whatsoever that could in any way affect the original common stock, but has always covered its liabilities directly out of its profits. As the new mill is the greatest improvement ever undertaken, various plans of raising the necessary fund were discussed; but it was finally decided that the Company would be far better off by maintaining the original method of paying out of the profits, even if it be by occasionally passing dividends, feeling assured that this work will redound to the material benefit of all the stockholders in the near future, and the Board anticipates the hope that it will be accomplished in this way. With the physical condition of the mine, with the great improvements and additions made during the past year, we are entering a new era which gives every indication of healthy prosperity, and prospectively quickly retrieving past dividends and more.*

FINANCIAL.

. The financial condition of the Company on this date is presented to you by the Treasurer, and the same is herewith printed. Our credit stands fully as high, and our drafts as eagerly sought, as heretofore.

ECONOMICS.

During the past year, in spite of extraordinarily heavy expenses and large increase in our working staff, it will be noted that our working charges have averaged lower than in former years.

POLITICAL.

During all of last year Honduras has been politically quiet. The Company has had the fullest co-operation of the Government.

The staff of employes has been strengthened very materially, and the Board of Directors and Officers highly appreciate the faithful and intelligent work done by our representatives and chiefs of departments.

Respectfully submitted,

W. S. VALENTINE,
President.

To the President and Board of Directors
of the New York & Honduras Rosario Mining Co.,
New York.

GENTLEMEN:—

The energies of all those connected with the operation of your mining properties in Honduras have been bent toward the reduction of costs, both in mining and milling.

When the writer was first commissioned by you to examine your properties, in November, 1906, the total cost for the year, based upon 31,450 tons of ore crushed, was $44.51. To one not acquainted with the conditions in Honduras under which the mines were operated, this cost seemed exceedingly high, and, in fact, it was an extravagant figure.

As you well know, the examination at that time was a hurried one, and the property and methods of operation were studied only in so far as the short time allowed. However, by following some suggested lines of improvement during 1907, the total cost was decreased to $42.20 per ton. By continued vigilance over the expenditures, and by changing the treatment of the ores over to the cyanide process, the costs were reduced during the years 1908 and 1909 to $36.65 and $36.09 per ton, showing a total reduction of $6.11 per ton since 1906.

A second examination was made of the properties in the spring of 1908, and during this inspection the methods of operating the mines and treating the ore were more thoroughly investigated and it was quite apparent that there were three policies which must be carried out in order to further increase the profits from the mines.

The first and most necessary improvement was to supply compressed air in order that development and drilling operations might be carried on more rapidly, more economically and more extensively than undertaken before. An examination was made of the water supply in and around San Juancito and after surveys and plans were completed your Board of Directors ordered the construction of what is now known as the Guadalupe hydro-electric power installation.

From a preliminary compilation of the expenditures, the plant, excluding any locomotive equipment, or air line equipment in the Peña Blanca tunnel, has cost to date approximately $316,193.00. These figures, as well as all previous figures, are Pesos. At the current rate of exchange of $2.70 this figures about $117,107.00 gold.

The tile floors are yet to be set in both stations and there are numerous minor details to be completed about each building, all of which will bring the cost of the plant to about $120,000.00 gold.

The next improvement that must be carried out in order to reduce the cost and increase the profits, is the construction of a new mill. I need not go into details in this matter, as you already have my ideas as to when and where it shall be built. The only thing that I wish to add is that I urge you to act with all speed in this matter, for reasons which I have previously submitted to you in a report. We are ready to go ahead with this construction work the minute you give your authority. As you know, the construction of a new mill at the mouth of the Rosario tunnel will necessitate the building of a new hydro-electric power plant at San Juancito and transmitting this power over our new transmission line to the proposed mill site.

The plan is to build a mill of about 200 tons daily capacity, located so that future additions may be made to it if necessary. This improvement will allow us to mill the present tonnage cheaper than it costs us to handle it now, and, moreover, will enable us, which will still further reduce the cost, to double the capacity of the present mill output. A greater reduction in cost can be accomplished by carrying out this improvement than can be made in any other department of operations.

Preparatory to the construction of the new mill, a cyanide expert is making exhaustive experiments regarding the proper treatment of the ores, so that no mistakes will be made in the new plans.

The third and last innovation which will be carried out and, in

fact, is a correlary to the building of the mill at Rosario tunnel, is the consolidation and removal of the headquarters of the property to the new mill site. At the present time we are practically sustaining two headquarters. This will necessitate the building of a new hotel for the staff, manager's house, machine shop, and all other various buildings necessary to the operation of the mines.

It is estimated that the cost of all these various improvements, viz: the new San Juancito power plant, building of the new mill, hotel, and the various houses and shops, will call for an expenditure of about $200,000.00 gold. This you may consider quite a large expenditure, coming right on top of the outlay for the Guadalupe power installation, but I can assure you that it is absolutely necessary, and it will more than pay for itself in the end. If the mine were in such a condition that it did not warrant this expenditure and great undertaking, I certainly would not recommend it; but we are getting to a point now where we must look out for the future, and be able to work the lower grade ore, of which we have a large quantity, but which we cannot profitably treat at the present time.

The mine is in better condition today that it ever has been in recent years, both physically and from the point of view of ore reserves. The mine has been re-surveyed and this survey has been compiled as a permanent record. Many of the old workings have been re-opened preparatory to looking for low-grade ore which has been left in the mine, and several cross-cuts and raises have been driven which permit of more economical handling of the ore and waste.

A system of sampling and assaying is now in vogue and it is only on account of the careful mapping of the sampling results on longitudinal section maps that we are able to give you estimates as to the ore reserves and recommendations as to future policy. This I consider one of the most important results of the Mine's work in the past two years, and I think you can readily see its relation to the future development of the mine and the treatment of the ore.

I refer you to the Annual Report of the Superintendent as to the detailed ore reserves. However, from the fact that I am recommending the extended improvements I desire to say that they are warranted from the fact that the Candelaria veins alone, as of October 1st, contains approximately 125,000 tons of ore which has an average value of about $16.00 gold per ton. With the improvements we have already made, together with those which we contemplate, there should be $5.00 per ton profit in this ore, but at the present time there is very little, if any, profit in it. No figures have been made on low-grade ore reserves in other portions of the mine, as many workings in the old Rosario vein are yet inaccessible and the sampling on other veins has not been completed; but it is safe to say that there will be an equal tonnage of this grade mined from all the other workings in the property.

An expert topographer is making a topographical survey of the territory embraced in the Company's claims. This will show the relation of the various mine workings to the surface, and will also be a great benefit in carrying on work outside of the mine department.

In conclusion it is desired to say that more attention and consideration is being given to the comfort and welfare of the various members of the staff; and in the building of the new headquarters great care and attention is going to be expended in that direction.

Again let me extend my appreciation of the co-operation of your Board of Directors and all of those in charge of the various branches of your work, both in New York and San Juancito, during the work which has been accomplished.

Respectfully submitted,

New York, December 14th, 1909.

FREDERICK H. MINARD.

Note—Herewith are presented the most important facts as reported by the General Agent and Mine Superintendent. All costs herein are given in silver currency, unless otherwise stated.

San Juancito, Honduras, November 12th, 1909.

To the President,

New York City.

DEAR SIR:—

ANNUAL REPORT.

As a general resume of the work done upon your property during the fiscal year ending September 30th, 1909, we take pleasure in submitting the following:

THE MINE.

The development work in the Mine while showing an increase of 1,307 feet over 1908, suffered considerably during the early part of the year owing to a strike of the miners, and again in the last three months due to the additional work of widening out the Peña Blanca Tunnel for the installation of new locomotives and Air Lines which caused a general set-back of the work.

The following table shows the number of feet advanced from October, 1908, to September, 1909, as well as a comparison of costs per lineal foot driven, showing a reduction of $2.67 Silver per foot over the previous year:

Development, 1908	Feet	12,473
An increase of	"	1,307
Total Development, 1909	"	13,780
		Cost per foot.
Total cost, 1909	$193,288.85	$14.02
Total cost, 1908	208,220.53	16.69

showing a reduction in costs of $14,931.68, or $2.67 per foot.

The total mining costs for the year ending September 30th, 1909, amounted to $637,544.59, or $19.44 per ton crushed, and, as compared with the previous year, showing a total of $556,216.79, or $18.84 per ton crushed, there is a difference in favor of 1908 of 60 cents per ton.

The costs of mining the ore while practically the same per ton crushed as during the year past, may be said to have reached the lowest mark under the existing conditions. The cost of keeping old workings accessible has been a large factor in the general expense, and the amounts paid for timber alone during the last five months of the year have increased in proportion to the added work of re-timbering all such abandoned tunnels and ore chutes as must be used continually.

By the details which follow it may be noted that apart from the item of Development, which is lower than the previous year, the above additional cost may be attributed to heavier expense in

	Per ton crushed
Stoping, amounting to	$5.89
Tram. & Var. Accounts, amounting to	1.15
Timbering Accounts, amounting to ..	2.31

and whilst it is evident that the installation of the New Power and Compressor Plants, discussed under another heading, will materially aid in reducing the cost of stoping and development, and that the new Electric Haulage System hereinafter described, will minimize the Tramming costs, the underground workings are becoming more expensive every month and it will be a difficult problem to effect a much greater saving in the item of Timbering.

As an addition to the new Guadalupe Power Plant, two new Electric Locomotives on a 24-inch gauge track, are to be installed in the Peña Blanca Tunnel, and these will handle all the waste from the workings above the Upper 150 Level, and tram it to the surface at a greatly reduced cost.

The persistent search for new territory was re-established more strongly than ever before when the new prospecting Crosscuts, extending to the Northeast and Northwest of the present workings, began to disclose mineralized regions within the practically undeveloped territory of the Mine. Of the above mentioned crosscuts, the Northwest presents today one of the principal objective points for future development. Driven primarily to intersect the San Vicente Vein, the region traversed by this Crosscut has laid bare a part of what is believed to be the Crucero Group of ore-bodies, and with the new and modern system of development

to be carried on in the immediate future with Machine Drills, the extent, strength and value of each and every Vein and Stringer will rapidly be determined.

For complete, detailed information regarding the Mine, its present work, and proposed future development, refer to the Mine Superintendent's Report which forms an annex hereto.

REDUCTION WORKS.

The total net tons crushed, 32,790, is greater than any before, but owing to the grade of ore being about 10% lower in value than in 1908, the total production was 2,541 ozs. Silver and 1,512 ozs. Gold less.

The increase in tonnage is accounted for by three main reasons:

1st:—In November, 1908, one new, complete Battery, of five Stamps, was installed at the Mill, making in all fifty (50) Stamps increasing the crushing capacity by at least 10%.

2nd:—The remaining three new Mortars replaced three old sectional Mortars that were in poor condition. These three old Mortars have since been repaired and have been used to replace other defective ones.

3rd:—When the Cyanide Plant began operations a 30-mesh Screen was used on the Batteries and chosen as standard for the Cyanide Process, but in September of this year it was deemed advisable to increase the work of the Tube Mills, which, taking the pulp from the Batteries after undergoing Classification, grind it to required fineness. Therefore, eight of the 30-mesh Screens then in use were taken out and replaced by slotted iron screens. As a result thereof the Mill is now crushing on an average of 100 tons of ore per day.

The figures of extraction show considerably less than last year, but in view of the conditions these can hardly be considered accurate. The basis for calculating the extraction is the assays obtained from the daily Battery sample. But as, since the adoption of the All-Cyanide-Process, the Mill has not been equipped with the facilities for obtaining a representative sample of the

ore as it enters the Batteries each day, the natural consequence has been that each month we have been confronted with a theoretical extraction much higher than the actual.

An inaccurate moisture sample, loss of solution by reason of leaky Mortars, and the native made Settling Tanks at the Mill, may all play an important part in these discrepancies, and the results of the experiments now being run by the Cyanide expert to exactly determine the causes, are awaited with great anxiety.

The detailed working costs of this Department during the twelve months ending September 30th, also a part hereof, show a remarkable reduction. This, notwithstanding the fact that 3,200 tons more of ore have been treated than in the year before.

Outside of the delays occasioned through storms, and time lost on repairs to the machinery, there were no serious accidents to mar the Mill-run for the year. The Cyanide Plant handled the daily tonnage of the Mill successfully and its operations were likewise uninterrupted.

CLEANING PLANT AND TRAMWAY.

The larger quantity of ore mined and sent to the Mill during the year has kept this Plant running continually and to its full capacity. It has handled a total of 35,391 wet tons, the greatest tonnage ever sent to the Mill in one year.

The gross expense was $50,348.40 as against $55,953.84 in the year 1908, resulting in a saving of $4,405.44, or $1.53 per ton crushed.

SURFACE DEPARTMENT.

The total cost of this Department during the year was $200,889.55, or $6.12 per ton crushed, and as compared with the year 1908 shows an increase of $1.40 per ton.

It must be remembered that all expenditures not directly applicable to Mining, Conveyance to Mill, and Milling, are herein considered, and, therefore, the amounts expended on road repairs which were heavier this year than ever before, cost of repairing damages wrought by the flood in October, 1908, and in

the months of August and September of the present year, as well as the additional expense incurred in the Hotel, for maintenance of the construction forces, justify the above increase.

RECAPITULATION OF COSTS.

	Total cost silver	Per Ton crushed
Mine Department	$637,544.59	$19.443
Tramway & Cleaning Department	50,348.40	1.535
Mill Department	294,698.78	8.989
Surface Department	200,889.55	6.126
Total Costs	$1,183,481.32	$36,093
As compared with 1908	1,081,985.73	36,655

A general explanation for the increase in total costs is given in our discussions under the respective Departments.

NEW MINERAL CONCESSIONS.

During the year there have been added to your properties in Honduras three new mineral concessions: the "Peten," "Escobales" and "Aurora" zones.

The "Peten" Zone, extending to the East from San Juancito, covers an area of 612 hectares. By a decree of January 19th, 1909, the Government granted the Company the mineral rights thereto, and prospect work commenced shortly afterward disclosed the existence of a number of Veins. These are within the so-called limestone formation of the region below our lowermost workings, nevertheless occasional values have been found therein. Most of the prospecting has been done on the surface, but a tunnel is now being driven on one of the Veins to enable us to determine whether greater values exist farther in the mountain, and if it would be profitable to prospect the surrounding country on a large scale.

The mineral zone "Escobales" is situated in a territory known as the "Cart-road" concession and consists of 950 hectares Heretofore the Company has owned the superficial rights to the property only; it was found advantageous to extend the mineral concessions in this direction, not only to ensure safety from outside encroachments but because promising outcroppings in differ-

ent parts led to the belief that possibly interesting discoveries might be made thereon at some date in the future.

Probably the most important annexation to your mineral properties of recent years is that which was completed in March, when, after many difficulties with the Government and opposing party, the mineral rights to the Aurora Zone were granted to the Company. The zone has an area of 999 hectares and is situated to the South of your present Workings.

Such promising out-croppings have been discovered in this region that plans are already on the way for prospecting there on a large scale. Moreover, as one of the best prospects in the Mine today is heading toward the South, there is every probability that this property will become of great importance to your enterprise in the near future.

THE GUADALUPE POWER PLANT.

This new Electrical Power Plant, the completion of which has just been accomplished, and which has been installed for the specific purposes of operating more machine drills in the Mine, furnishing air to important works that have had to be abandoned for the want of ventilation, and increasing the power supply for future requirements, marks the beginning of a new era of development in the history of the Company.

The underground workings of the mine had progressed to such an extent that economical operation demanded better Compressor service, and also that old methods and hand drilling be superseded by machine drilling and modern equipments. The gradual diminishment of the present Vein system, and the impossibility of working existing Stopes and at the same time developing the places that gave promise of leading to new Vein systems with the outfit on hand, made the adoption and installation of the new Guadalupe Power Plant a matter of necessity and not one of choice.

On October the 4th, as per cable sent you, the Plant was first put to the various tests and, aside from slight adjustments which

are always necessary, the machinery, due to the care and intelligence displayed in its installation, ran smoothly.

The Compressors will furnish air for a large number of Piston Drills for drifting purposes, hammer drills for Stoping and Raising, and the exhaust from the drills will serve to ventilate the Mine.

As soon as the new drilling equipment arrives, the rapid development of the Veins intersected by the Northwest Cross-cut, the Candelaria on the Lower 650 Level, and other most important places will be prosecuted, the prime object for which this new installation was made will then begin to be a realization, and, from present indications, we look forward to the opening up of new ore-bodies that will give new life and impetus to the enterprise.

GENERAL.

The Ore Reserves, as estimated in the Report of the Mine Superintendent, show a total of 42,065 tons, which include the liberal waste allowance of 27%. The value of the ore is calculated to be $25.41, U. S.C., per ton delivered at Mill. Although lower than reported last year, the anticipated reduction in mining costs with the new equipment, and a greater capacity of the Mill during the current year should make up for the difference.

The development work, although somewhat retarded by reasons already enumerated, was accomplished under decidedly more economical conditions than in the year before.

At the Mill, extensive repairs for the up-keep and proper running of the machinery, have been made necessary oftener than ordinarily demanded by a Plant of its capacity, and which is used merely as a crushing station. But this is explained by the fact that the main buildings have stood for over 20 years and that most all under their roofs have undergone the strain of work over a like period of time. The dilapidated condition of all timber supports under the main ore bins were such that a decided settling of these took place, and this called for prompt action. During the month of May, the entire force of carpenters was called to

brace the bins from the outside with new timbers, and had not this been done at the proper time, the East wing, weighted down with the ore, would have collapsed and caused the shut-down of the Mill for an indefinite period.

Herein we deem it proper to mention that the foregoing brings up for careful consideration the necessity of new Reduction Works. Whilst it is true that the cyanide plant, but a few years old, has rendered good service, and that any move toward the construction of a new mill would entail a heavy expenditure, the favorable conditions as outlined in the Mine Superintendent's Report for treating a greater quantity of lower grade ore, the natural decrease in mining costs with the modern system of underground development to be employed, and the consequent advantage of consolidating the Reduction Works closer to the Portal of the Mine, are all important factors should the formulation of plans such as concern the economical and profitable running of your enterprise, be contemplated.

The methods inaugurated last year have been generally successful in keeping down the working costs and it has been our aim to concentrate the work of every department as much as possible in order to insure co-operation and maintain throughout a system of economy and efficient running.

All buildings and plants have been kept in constant repair, and only such changes and additions required for the actual work of the Plants have from time to time been made.

The storms which occurred in October, 1908, at the height of the rainy season have fortunately escaped us thus far and the Works in general have not suffered such grave losses. The heavy rains which fell during the month of September and the early part of October, of this year, caused the repeated stoppage of the Mill and Power Plants owing to washouts on the Flume Line, but no serious delays occurred therefrom. A constant force of men has been kept at work repairing the roads, and the main cart-road to Tegucigalpa has entailed a greater expenditure than ever in clearing land-slides and keeping traffic open. Since the arrival

of the heavy machinery, however, cart freight has been considerably lighter and outside of the freighting of the new locomotives for the Peña Blanca Tunnel, which are expected within a few weeks, there will be a temporary lull in the movements of carts, and likewise, a decrease in costs thereby.

The steps recently taken by the Company towards providing comfortable quarters and better and more wholesome food for its employes deserve special mention herein. Each room is now fitted out with a neat spring bed, mattress and a liberal amount of bed clothing. Four Chinese cooks, imported from Mexico, perform the cooking and run the Mine Mess and Hotel at the Lower Works with skill and economy, and, on the whole, it has been the means of establishing such feeling of satisfaction and contentment as has not been realized in a good many years.

In conclusion, we desire to express to the Officers and Board of Directors the deep satisfaction and appreciation with which we view the thoughtful consideration given to all that the work here demands, as also for the continuance of the former munificent policy of supplying every means for the successful operation of each and every branch of your enterprise.

Respectfully submitted,

L. F. VALENTINE,
General Agent.

LA MINA.

November 11th, 1909.

To the General Agent,
San Juancito.

DEAR SIR:—

We take pleasure in submitting the following report describing the work done at the Mine during the year ending October 1, 1909.

ORE EXTRACTED.

The ore extracted during the past year consisted of, approximately, 35,391 wet tons, the tonnage being calculated from the number of cars handled, the average capacity of each car being considered as about .58 tons. The following shows the amount of ore produced:

Total cars, 61,354; wet tons, 35,391. The net tonnage at Mill, by actual weight, was 35,810 tons.

DEVELOPMENT.

The advance made in lineal feet for development operations in drifting, raising and cross-cutting, in and for the various veins, is shown in the following table, in condensed form:

TOTAL FOOTAGE FOR YEAR ENDING OCTOBER 1st, 1909.

	Drifting	Raising	Cross-cutting
	9,113½	2,251	2,249½
Total Development		Feet	13,614
Total Plus Connections		"	13,780

A brief description of development and its result in each vein will be found in the following paragraphs:

CANDELARIA.

The limit of vigorous development in this Vein was reached about eight months ago. The Upper 150, Upper 250 and Upper 350 levels, which in the past opened up at least 85 per cent of the available ore, ran into old workings in the Rosario vein. The development now being pushed is that outlined in the last Annual Report, and we are pleased to state that it has already given important results. By referring to our last Annual Report you will note that there were no Upper 500 Candelaria nor Lower 200 Candelaria levels. Now there are three

source of high-grade ore, and on the Lower 200 Level there now exists what perhaps is the richest Stope in the entire Mine, the Vein in places being over four (4) feet in width and worth about $250.00 U. S. Currency per ton.

From time to time several small bunches of good ore have been encountered on the Zero Level which do not appear to extend to the upper workings. This fact establishes the possibility of ore important Stopes on the Upper 500 Level, one of which is the occurrences at a lower region than the Zero Level and caused us to begin development on the Lower 200 Level, with the already mentioned satisfactory result; also to project a X-cut to the North on the Lower 650, or Rosario, Level, in Block 39, to cut the Vein. Two months ago this X-cut intersected what we believe to be the Candelaria at a point 505 feet North of the Rosario Vein, some good values being encountered; the same, however, not being of sufficient extent to have stoping importance. Driving is being done in the Vein in an Easterly and Westerly direction, and a Raise is also being run to prospect the upper territory. The development up to date has shown the Vein to have an average width of about 1.2 feet, and it has disclosed a number of important facts, as follows:

1st: The Vein has a decided dip to the North-east while in the upper workings it is practically vertical.

2nd: Any ore found at this Level probably will not be a sulphide ore but will be more or less oxidized.

3rd: The values occur in native gold and silver and are likely to be much coarser than any found in the upper working.

In spite of the ore found on the Upper 500 Level and that on the Lower 200 Level, the Candelaria Vein will from now on gradually decrease in importance as a producer, due to the fact that these two territories, which are about the only important regions for development above the Lower 200, are limited in their extent and, consequently, no very large tonnages can be expected from them. Development was recently started in the Guadalupe Vein on the Lower 300 Level, to get under the rich values opened up by the Lower 200 Candelaria Heading. It will be at least nine months before this territory can be reached.

CATALINA.

The Raise ran to act as a waste and ore chute, has been completed, and outside of this no other work was done in this Vein in the past year. Some of the old Stopes on the Upper 350 and 150 Levels were re-sampled, and the ore blocked out. This ore is very rich, but the Vein is extremely narrow and occurs in hard ground, necessitating a very liberal allowance for waste.

It has long been the desire to thoroughly prospect the comparatively extensive territory to the South, South-east and South-west of the Catalina Heading, but this we have not been able to do on account of the difficulty encountered in handling the waste matter from the Heading and the lack of compressed air with which to do the development. Now, however, the Compressed Air Plant has been installed, the Drill Equipment and electric locomotives are en route, and as soon as these are installed vigorous development of this important territory will be started.

COLONIA VEIN.

In the early part of the year a Cross-cut started on the Lower 300 Level of the Rosario Mine, cut this vein at a point 115 feet lower than its lowest workings. The ensuing development has opened up good ore, as indicated on Colonia map and Ore Reserve sheet, disproving the theory that values in this Vein would not continue as depth was attained. The development on the Lower 300 Level of the Rosario Mine has given indications which lead us to believe that it would pay to prospect this Vein at even greater depth than the Lower 300 Level. Consequently, a Cross-cut is planned which is to start from the Lower 650, or Rosario Level, and, if it cuts the vein, will expose it about 370 feet lower than the Lower 300 Level. This Cross-cut will serve a double purpose as it will also cut into the Nueva Vein.

The widest and richest portion of the Colonia Vein has been nearly all stoped, that is, above the Lower 100 Level (Colonia Mine). On the Lower 300 Level the ore opened up in the early part of the year is now being stoped. It has good width and value and gives every indication of holding out for at least another year. There are still several thousand tons of high-grade ore in the upper workings of the Colonia Mine, but the Vein containing this ore, although as rich as ever, is now so narrow that there is but a small margin of profit in mining it for the present Reduction Works. We have, however, had good success in

leasing portions of the Colonia Mine and have by this means, been able to obtain some good ore.

CULEBRA VEIN.

This Vein is a Stringer off the Buena Ventura Vein. It has been an important source of high-grade ore during the last 8 months, but the stope on the Upper 500 Level from which this ore came is now nearly exhausted. We have, however, been pushing the development on the Upper 350 Level. This necessitated advancing the Buena Ventura Heading for over 100 feet to the Southeast, until the junction of the two veins could be reached. On arriving at what we thought was the junction, no vein could be found, and going about 60 feet to the Southeast of where the junction should have been, a Stringer having a Northeasterly direction and carrying stoping values was found and which widened out to important proportions, still carrying good values being as wide as five feet in places. Nevertheless, the average width would not be more than 2.5 feet. We believe that this new find will come up to all our expectations, and that it will be an important source of ore in the future.

GUADALUPE VEIN.

The Guadalupe Vein is one which has been exhausted for several years. Nevertheless, it is always producing a little ore which comes principally from the old and abandoned workings. We have been exceedingly fortunate in locating what we believe will be a body of about 2,000 tons of high-grade ore on the Lower 400 Level, in Blocks 49, 50 and 51. The body is so located that it can be mined and stored in former waste chute No. 52 and later sent to the mill. In this way we will be able to obtain an actual Mill test, the results of which will be absolutely conclusive in giving us an idea as to what can be expected from a good many thousand tons of ore of a similar character, too low in grade to answer present Milling purposes, but which, however, would be mined were new Reduction Works erected. Should the development in the Candelaria on the Upper 500 Level justify it, we will begin drifting

in the Upper 600 and Upper 700 Guadalupe Headings and extend them into the Candelaria territory.

NORTH VEIN.

The North Vein ceased to be an important producer of high-grade ore several months ago. There is still a fair quantity of good ore to be had, however, which will be taken out at a slower rate. Only a few weeks past development in the Heading on the Upper 350 Level, was again resumed, and when this was started there was no Vein in the Heading. Now, however, there is a vein about 5 feet in width, which carries values. While not of stoping importance, it is quite possible that the Vein will widen out and perhaps bring us into another rich Pocket similar to the one found in the Upper 500 Heading when that heading was again resumed after being abandoned for the same reason as that which caused the abandonment of the Upper 350 Heading. Development in this latter Heading proceeds but slowly, as the ground is hard.

NORTH WEST VEIN.

This Vein was thoroughly developed some years ago and all ore of value at that time taken out. The Vein occurs mostly in solid formation, so the greater portion of the old workings are open. Some Pillars were found on the Lower 200 Level about a year ago, which are still producing ore, and only recently more were found in connection with the Mine Examination now being made. The Levels which are accessible in this Vein are the Upper 600, Upper 500, Upper 350, Upper 250, Upper 150, Lower 100, Lower 200, Lower 300 and Lower 400.

NUEVA VEIN.

There has been extensive development on the Lower 200, 300 and 400 Levels, but none above the Lower 200 Level. This is due to the extensive faulting which is one of the characteristics of this Vein and which cuts it off above the Lower 200 Level.

In the Semi-Annual Report we described in detail the faulting of the territory in which this Vein occurs, and formulated plans

of development by which it will again be located. A portion of this development, the driving of a Cross-cut on the Zero Level, in Block 45, off the Candelaria and in a Northerly direction, has been completed and with satisfactory results. We are now stoping in the Vein on this Level and the probabilities are that the ore will extend to the Peña Blanca Level.

ROSARIO VEIN.

The Heading East on the Lower 400 Level was extended from Block 31 to Block 28. Occasionally good ore is encountered, but not in sufficient quantity to warrant stoping. A Cross-cut in Block 29, started about five months ago, in a Northerly direction, cut into a Vein having a Northwesterly course. This vein will now easily average five feet in width and there are places where it is as wide as 8 feet. Unfortunately, the values are very low, and cannot be called even low-grade ore. We are very much inclined to think from this that the present drift is below the ore-bearing zone and have, therefore, recently started a Raise to prospect the upper territory.

A Raise was started in the Lower 400 Rosario Vein, in Block 32, to connect with an old Stope existing in the Floor of the Lower 300 Level. Some good ore was found, and it is now being stoped. We will continue to drive the Rosario Heading in an Easterly direction in order to get under the region which in the past is said to have been part of the largest bonanzas the Mine has ever had. We are compelled to do development on the Rosario Vein more or less on the strength of hearsay, as the workings from which we could obtain correct data are all caved.

SOCORRO VEIN.

This Vein continues to be a small but steady producer, the ore coming principally from the old Stopes on the Upper 500 and Upper 600 Levels. The Upper 500 Level Stope is the source of a small tonnage of high-grade ore, the limit of which will be reached within the coming year. The Upper 700 Stope

has considerable low-grade ore, which will be mined as soon as the new drill equipment is installed.

WEST VEIN.

The Heading on the Zero Level is being extended in a Westerly direction, the object being to get into the zone which produced ore on the Upper 150 Level; also to cut into the Catalina Vein.

Upon closely examining and re-surveying all accessible old workings, the conclusion has been reached that there is not enough ore in any one place to warrant the expenditure necssary to put it in shape for stoping. In the Semi-Annual Report we submitted a plan in considerable detail, accompanied by drawings, indicating the mode of future development to be effected in this Vein. We still believe that this is the only feasible method, and will start development on said lines as soon as the new underground equipment arrives. The territory ahead of the West Headings is quite extensive, and we consider it very important.

THE CRUCERO GROUP.

The importance of this group as a future ore producer has been recognized for more than ten years, and considerable work on the San Miguel, the San Vicente and Concepción Veins, which are the most important of this group, has been accomplished from the surface. Recent surveys and samples of this work show that each of these three veins produced ore which must have been of a high grade in order to have paid. Half-hearted attempts have been made to develop the group by a Cross-cut on the Lower 300 Level, which Cross-cut was driven a considerable distance and finally abandoned. A little over a year ago it was recovered, cleaned, re-timbered and a new track was laid, about 100 feet of work being done. This work showed that it would be better to develop the Crucero Group at a higher horizon and, consequently, a Cross-cut, called the Upper 150 N. W., Block 56, was started at the Peña Blanca Level. To push this Cross-cut with greater rapidity the old Compressor was put

in shape so that Rock Drills could be used, and foreign labor was imported to operate them. It has been given the preference over all other development and is now 1100 feet in length.

Last February upon approaching the Crucero territory, a Vein, now called the Capitana, was cut. This Vein has a Northeasterly direction and 459 feet of drifting and 165 of Raising have shown it to be on an average of .7 feet in width and to contain good ore which, however, is very pockety in nature. One rich Pocket, which is reported in the accompanying Ore Reserves, is now being stoped with a "Waugh" Stoping Drill. This Pocket we believe to be a large one, and a valuable addition to the general high-grade ore reserve. The Vein continues strong in the South-east Heading to which most of the lateral development has been confined, also in two Raises in Blocks 54 and 56 respectively, the one in the latter now being 135 feet in height.

The fact that a vein carrying very high values, (some assays showing as high as 900 ozs. silver and 30 ozs. gold), occurring in a territory so near to the Crucero Group, at once leads us to believe that the Veins constituting this Group might in some way be connected with the Capitana, and consequently, we continued the Northwest Capitana Heading, although it was driven on a Stringer which would not average over .2 feet width and practically valueless, with the hope that the junction of one of the Crucero veins might be reached. This theory, outlined in the Semi-Annual Report under the heading of "General Remarks," was proven to be absolutely well founded, inasmuch as two weeks ago we cut in the Northwest Capitana Heading what is believed to be the San Miguel Vein. This vein is very wide, being over 9 feet in places, and Northeast of the junction of the Capitana the average width is at least 5 feet. The values, while not high, are quite uniform. They occur in the sulphide form, one of the characteristics of the Vein being that the values are principally all in Silver. So far the Vein will easily average $60.00 U. S. Currency per ton.

Development is being pushed as rapidly as possible and our

best men and equipment are on this work. Assuming that this is the San Miguel, the Northeast Heading has about 900 feet to traverse before the surface can be reached, and the Southwest Heading, should the Vein continue for any distance on the other side of the Capitana, has about 1200 feet to go before it can intersect the West Vein. If the San Miguel keeps its present course, which is North 25 degrees East, it would again be cut by the Northwest Cross-cut Heading in about 60 feet; also, in a similar distance, by a small Cross-cut recently started off the main Northwest Cross-cut in a Westerly direction. Should we be fortunate enough to get the Vein in these two additional places, it can be developed very rapidly, as then it will be possible to drive six headings instead of two as at present. We are still looking for the Concepción and San Vicente and it is possible that the failure to find the latter has been due to the fact that it would have to cross the San Miguel before it could be intersected by the Cross-cut.

The possibilities of ore occurrences in the Concepción and San Vicente Veins are materially increased in view of the fact that the territory in which they occur has now proven to be a highly mineralized one.

AURORA CONCESSION.

The preliminary work, which consisted in tying the boundaries of the concession to our main triangulation system, making surface map and locating thereon all known Veins, is all that has been done up to date. Very shortly, work will begin which will consist of systematic development in three veins, one of which is nearly two feet in width and appears to be of considerable strength. None of the Veins located up to date appear to carry values, although this is not at all surprising inasmuch as practically none of the Veins in the entire Tegucigalpa-San Juancito vicinity carry values at the surface. While going over the ground a piece of quartz float was picked up, which, upon assay, yielded 60 ozs. Ag., and .48 Au. This float was found not far from the above mentioned Vein. Some of the territory consti-

tuting the concession appears to be highly mineralized and is worth extensive development.

UNDERGROUND HAULAGE.

The Locomotives at Rosario were operated day and night throughout the entire year and gave good service. These machines are getting very much worn and cannot be expected to render satisfactory service for a much longer period. Should new Reduction Works be erected new locomotives of a better pattern must be installed.

The Mine Track has been increased by about 10,000 feet. Our general haulage system has greatly increased in efficiency, and as a result, the underground tramming costs have not increased in proportion to the additional distances covered.

LEASING.

The method of giving leases was thoroughly explained in the Semi-Annual Report. We have had good success in working narrow Veins by this method and will endeavor to extend it wherever applicable.

STOPE PROSPECTING.

This method was explained in detail in the last Annual Report. It is one of the most important methods of locating ore, and is constantly used.

ORE RESERVES.

The Ore Reserves as existing on October 1st, 1909, show 33,068 tons of Vein matter in place, calculated on a basis of 13 cubic feet per ton and exposed on one, two, three and four sides, as given in detail on the Ore Reserve Sheets and Maps, and 42,065 tons including 27% waste, which necessarily must be mined with the ore. The value per ton, including waste, is $28.23 U. S. Currency. A deduction of about 10% must be made for errors in sampling, measurement and waste estimate, which brings the value down to $25.41 per ton delivered to the Mill.

While the value per ton this year is about $3.50 lower than that reported last year, only 19% waste was allowed last year whereas 27% is the allowance figured this year. The increase in waste allowance is due to the fact that the Veins on the whole are at least 15% narrower than in 1908.

MINE EXAMINATION.

It has long been our belief that a large tonnage of ore of a value between $10.00 and $15.00 per ton existed in this Mine, and in last year's Report we took occasion to request that you send two additional engineers and one sampler, so that all open and re-opened workings and Stopes could be surveyed and sampled with greater rapidity and the exact quantity and quality of lower grade ore be determined. In the Semi-Annual Report we reported progress in this examination, and as but little has been done in this direction since then, due to the transferring of one of the engineers to the Mill and one being occupied mostly on the Guadalupe construction work, the quantity of ore measured up to April 1st is practically the same now. The following is quoted from the Semi-Annual Report:

"This examination is being made for the special purpose of determining the quantity and quality of available low-grade ore, the existence of which has been suspected for sometime. Also to survey, sample and map all opened and recovered workings, and thus have a complete record of the Mine. The preliminary examination and sampling is conducted personally, assisted by an engineer and a sampler. We locate and sample all likely looking places in the main Veins, as well as Stringers. Full descriptions and sketches of the ground gone over are kept, as well as any reliable information obtained from old employes familiar with the workings now inaccessible. We are able to cover on an average but about 800 to 1000 feet per day, so progress is necessarily slow when the large extent of the workings is considered.

So far as it is known now, it will be at least 10 months more before the final report and maps can be submitted. Thinking, however, you might be interested in the work as it has progressed up to date,—April 1st, 1909,—we herewith submit the following figures on low-grade ore in the various Veins, accompanied by maps."

Vein	Width	Average Assays Ag.	Au.	Tons	Per ton	Total Value	Waste Per Cent.	Tons to Mill
Candelaria	...1.5	27.7	.45	120,000	$22.35	$2,742,000	26	150,000
Colonia	8	83.1	.59	18,000	53.35	960,000	40	25,000
Nueva	8	37.6	.40	5,000	26.80	134,000	40	7,000
Guadalupe	...1.4	22.2	.35	20,000	18.10	362,000	25	25,000
				163,000	25.75	4,198,000	27.1	207,900

Total Tons 163,000
Total Tons, including waste 207,000
Total Values per ton. $20.76
Total Value.....$4,198,000.00
Percentage of Waste Mined 27.1%

Ag. @ 50c. oz.
Au. @ $20. oz.

"The above tonnage figures have been obtained by calculating ore that has been *absolutely known* to exist. Also you will see that a much more generous allowance for waste has been made in the Candelaria Vein, and as the tonnage from this Vein is so much greater than the tonnage from the other three veins, this will make the value per ton of the grand total more conservative. A deduction of say 12%, should now be made from the value of the ore delivered at Mill, for inaccuracy of sampling and measurements, which will bring the total value per ton down to $17.83 This tonnage and value is calculated as existing on April 1st, 1909, and *includes the ore reported in the reserves accompanying this report.*

"There is no doubt that more ore will be measured up when this examination is concluded, as the Rosario, Socorro, North, Buena Ventura, Northwest, West, Catalina and Culebra Veins and also several Stringers, are still to be

heard from. It must not be supposed that the figures submitted now in low-grade ore in the Candelaria, Guadalupe, Nueva and Colonia are final, as development is being done in some of these Veins and probably more low-grade ore will be found; these figures only show what ore has been located up to date.

"We would call your attention to the fact that the value of $17.83, U. S. C., per ton of the grand total is a variable quantity, depending solely upon the value and amount of ore taken from this grand total for the present Reduction Works and the value and amount of ore which is yet to be found by future development to replace this amount taken for present purposes."

This examination will be resumed shortly and the progress thereon duly reported.

PENA BLANCA AIR COMPRESSORS AND ELECTRIC HAULAGE.

The old Compressor, which has been in operation since 1885, practically went out of Commission upon the 10th of October. It was superseded by a plant of about 8 times its capacity and up-to-date in every respect.

We feel very proud of this new Plant and know that no expense has been spared to make it first-class in every detail.

The combined capacity of these two Compressors, which is over 4100 cubic feet per minute, will enable us to do practically all of our stoping and development by means of compressed air.

The plans made and submitted in the last Annual Report, to protect the Compressors and the Dump from future wash-outs and land-slides, have been nearly completed. We now have a large masonry wall which we think strong enough to resist a land-slide of even larger proportions than the one which occurred last October.

Particular attention has been paid to the re-surveying and mapping of the Mine and the filing of the records thus obtained. That our surveys must be very accurately made and plotted, and

the records ready for instant reference, goes without saying when it is remembered that about 50 miles constitutes the workings of the entire Mine. We do not hesitate to say that there is no Mine of a similar character that has more accurate and complete maps.

The Engineering and Sampling Departments have at their command the best equipment obtainable and are in charge of well trained and efficient men. We take pleasure in submitting to you some maps which are the product of these Departments.

The remarks made regarding the Candelaria Vein, under the heading in this report of "Candelaria," are not of an encouraging nature, but they state absolute facts. This Vein has not only been the source of our richest ore but it has also been the source of at least 50% of the entire ore mined in the last 2½ years. The decrease in production will, of course, come very gradually and will have to be made up from new sources. We consider the strike in the North West Cross-cut, namely, the San Miguel, as the best find since the Guadalupe and West Veins were discovered. Although there is practically no development on the San Miguel at present, we feel confident in stating that it will be one of the veins which will help to take the place of the Candelaria. The territory in which this Vein occurs is much more limited than that of the Candelaria; nevertheless, we believe the Vein will be much wider as indicated by the old workings at the surface and in the Northwest Cross-cut. We also believe that at this time next year the Crucero Group, of which the San Miguel is one of the Veins, will be the source of some of our best ore, and, if necessary, our greatest tonnage. It is our aim to first work out, wherever possible, the older sections of the Mine in favor of the new ones, so that development in the new sections be not retarded, as is the case in the majority of our older workings.

We have again resumed operations in the Lower 300 Cross-cut to the Crucero Group. As there are some 700 feet to be driven on this Level before the San Miguel is intersected, it is

safe to say that at least a year will elapse before that vicinity can be reached. Should the San Miguel in the Northwest Cross-cut carry its present width and values and continue in this state for say 200 feet, we will sink on the Vein and develop the territory below the Peña Blanca Level and not wait until the work in the Lower 300 Cross-cut is completed.

The policy of not confining the entire development to the existing vein system, as has been the persistent custom in past years, has proven to be a wise one. Although all the veins intersected by the Cross-cuts run have not been ore-bearing, every Cross-cut project of any importance has cut at least one vein and about one-third of these veins are ore-producers now. We are confident that at no time in the history of the Mine has there been so much development done as in the past year and at such low cost per foot.

That the total mining costs are not lower this year than last, is due to the fact that the Lower 650, or Rosario, Level, has practically been re-timbered, as well as many old and caved workings. When it is considered that the Rosario Level has about 8,000 feet of workings, more than half of which require timbering, and that this is only one of sixteen, you will see that the item of timbering is not by any means a small one.

As far as we can see now, there will be from 25 to 30 Stoping Drills in constant operation in Stopes and Raises, and from 25 to 30 Drifting Drills in driving headings.

On the whole, the future of the Mine appears to be as bright as last year, and as has been stated many times in this Report, it will be our aim to push development and by its means place the Mine on a safer and more economical basis than ever before.

Respectfully submitted,

A. R. GORDON, E. M.,
Mine Superintendent.

RECAPITULATION

Vein	Tons	Tons, Ore & Waste	Value	Value Per ton	Waste Per cent
Candelaria	20,987	23,932	$587,327.00	$24.55	14.0
Colonia	3,135	4,955	216,427.00	43.68	58.2
North	750	1,042	33,684.00	32.36	38.8
Nueva	2,498	3,794	123,463.00	32.54	52.0
Socorro	1,528	2,052	55,093.00	26.84	34.0
Guadalupe	2,075	2,458	45,868.00	18.66	18.5
Culebra	198	331	9,831.00	29.70	67.0
Rosario	225	270	67.50	25.00	20.0
North West	310	387	10,199,00	26.35	25.0
Buena Ventura	82	98	2,460.00	25.10	20.0
Sphalerite	100	120	2,900.00	24.16	20.0
Catalina	425	927	32,673.00	39.51	118.0
Capitana	755	1,699	60,815.00	35.80	125.0

Total tons of ore	33,068
Total tons of ore and waste	42,065
Total value (U. S. Currency)	$1,180,807.50
Value per ton	$ 28.23
Average per cent of waste	27.0%

San Juancito, October 1st, 1909.

New York, Dec. 1st, 1909.

To the President & Board of Directors of the
New York & Honduras Rosario Mining Co.

GENTLEMEN:—

Herewith is presented the statement of the result during the fiscal period of ten months. The reasons why this period is not for the full year is explained in the Auditors' Report annexed.

From December 1st, 1908, to September 30th, 1909, the production resulted in 801,200 ozs. Silver, and 11,375 ozs. Gold, realizing $636,500.00. If the two months production, October and November, 1909, amounting to $128,500.00, is added to this amount, (the full year's production), the total would have been $24,000.00 less than for the corresponding period of 1908. The reasons for this smaller amount are due to the continued low price of silver, the lower grade of ore being worked, and other causes as explained in the General Agent's Report.

Owing to the large expenditures for the Guadalupe Power Plant, but eight dividends were paid, aggregating $120,000.

Our net Cash Assets on this date are $198,242.00, including $40,158.00 due from the Government of Honduras.

The Honduras Government debt was originally $47,785.05, and is now $40,158.41. We are officially informed that negotiations are going on between the Honduras Government and banking interests in New York, for the refunding of the Government's debt, and at the present writing the prospects of a favorable culmination are bright. In this case the whole amount with interest will be paid in cash at an early date.

The Surplus Account is $1,184,674.13.

The Report of the Security Audit Co., also the statement of the dividends and production, are herewith presented.

Respectfully submitted,

S. HEIDELSHEIMER,
Treasurer.

New York, December 6th, 1909.

To the President and Board of Directors of the
New York and Honduras Rosario Mining Company.

GENTLEMEN :—

In accordance with your instructions, we have audited the books of account of your corporation, kept at its office in this City, for the period from December 1st, 1908, to September 30th, 1909, (ten months), and certify, subject to the valuation of the inventories and to verification of the cash assets at the Mines, that the same are correct and in accordance with the Balance Sheet and Statements of Profit and Loss and Surplus, annexed hereto and forming part of this Report.

In order to have the financial statements in the future cover the same fiscal period here and at the Mines, the books of the New York Office were, upon our recommendations, closed on September 30th instead of, as heretofore, on November 30th.

Respectfully submitted,

THE SECURITY AUDIT CO. OF N. Y.
GEO. WEAVER,
Treasurer.

NEW YORK AND HONDURAS ROSARIO MINING COMPANY, NEW YORK.

Balance Sheet, September 30th 1909.

ASSETS		
Cash in Bank an on hand in New York	$117.93	
Accounts Receivable	1,372.00	
Superintendent's Account in Honduras	74,735.92	
New York City Bonds, 1911, at par..	50,000.00	
Loan to the Government of Honduras	40,158.41	
Bullion	127,845.03	
Ores, Slimes, etc.	57,048.00	
Supplies	142,451.32	
	493,728.61	
Mines, Real Estate other than buildings, Concessions, etc.	1,684,303.00	
Tramway and Gravity Road	22,870.00	
Buildings	35,899.00	
Machine Shop	22,738.00	
Mill Machinery	224,740.00	
Power Plants	210,049.00	
Transportation and Freighting Equipments	9,009.00	
Implements, Tools and Appurtenances at Mines	20,487.00	
Property at Agencies	16,640.00	
Live Stock	3,516.00	
Office Furniture in New York and at the Mines	6,649.00	
LIABILITIES		
Acceptances, Notes and Accounts Payable		$65,954.48
Capital Stock		1,500,000.00
Surplus Account		1,184,674.13
	$2,750,628.61	$2,750,628.61

NEW YORK AND HONDURAS ROSARIO MINING COMPANY, NEW YORK.

Statement of Profit and Loss for fiscal period from December 1st, 1908, to September 30th, 1909. (Ten Months.)

To Bullion on hand or in transit December 1st, 1908	$116,636.54	
" Ore, etc. on hand October 1st, 1908.	70,424.00	
By Bullion sold during the fiscal period		$625,330.63
" Bullion on hand or in transit September 30, 1909		127,845.03
" Ore, etc. on hand September 30, 1909		57,048.00
To Operation Expenses (See note below)	519,146.29	
" Balance Gross Profit	104,016.83	
	$810,223.66	$810,223.66
By Balance brought down		104,016.83
" Interest on Bonds		1,250.00
To Office Rent	$1,833.40	
" Salaries	14,330.34	
" Directors' Meetings	2,738.00	
" Stationery	258.45	
" Portage	367.90	
" Cables and Telegrams	373.87	
" Taxes	180.00	
" Legal Expenses	204.82	
" Honduras Examination	18,634.38	
" Interest on Loans	709.88	
" Miscellaneous Expenses	1,222.62	
	$40,853.66	
" Balance, being Net Profit for the fiscal period, 10 months	64,413.17	
	$105,266.83	$105,266.83

AUDITOR'S NOTE:—

The Operating Expenses, amounting to $519,146.29, cover the period of twelve months from October 1st, 1908, to September 30th, 1909, while the other expenses and the income are only for ten months. This is caused by the change in the closing of the books mentioned in the report which, however, will enable the Accounting Department in the future to render statements of income and expenses for the same fiscal period instead of, as heretofore, for different periods.

NEW YORK AND HONDURAS ROSARIO MINING COMPANY, NEW YORK.

Surplus Account, October 1st, 1909.

By Balance, December 1st, 1908			$1,240,260.96
To Dividends paid:			
Dec. 18, 1908.....	$15,000.00		
Jan. 23, 1909.....	15,000.00		
Apr. 23, 1909.....	15,000.00		
May 21, 1909.....	15,000.00		
June 25, 1909.....	15,000.00		
July 31, 1909.....	15,000.00		
Aug. 28, 1909.....	15,000.00		
Sept. 29, 1909.....	15,000.00	$120,000.00	
By Net Profit for ten months ended September 30, 1909 (See the Profit and Loss Statement)			64,413.17
To Balance September 30, 1909.		1,184,674.13	
		$1,304,674.13	$1,304,674.13
By Balance, October 1st, 1909			$1,184,674.13

ANNEX.

Bullion Production.

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
Total	$14,639,873.66

Dividends

1887 No. 1	$37,500
1888 Nos. 2 to 5	60,000
1889 Nos. 6 to 14	150,000
1891 Nos. 15 to 16	30,000
1892 Nos. 17 to 21	165,000
1893 Nos. 22 to 25	150,000
1894 No. 26	37,500
1896 Nos. 27 to 28	30,000
1897 Nos. 29 to 40	180,000
1898 Nos. 41 to 48	120,000
1899 Nos. 49 to 60	180,000
1900 Nos. 61 to 75	225,000
1901 Nos. 76 to 93	300,000
1902 Nos. 94 to 100	105,000
1903 No, 101	15,000
1904 Nos. 102 to 108	105,000
1905 Nos. 109 to 121	180,000
1906 Nos. 122 to 139	285,000
1907 Nos. 140 to 153	210,000
1908 Nos. 154 to 165	180,000
1909 Nos. 166 to 173	120,000
Total	$2,865,000

New York, December 1st, 1909.

To the President & Board of Directors of the
New York & Honduras Rosario Mining Co.

GENTLEMEN:—

The records of work accomplished during the fiscal year ending September 30th, 1909, are given in detail on preceding pages.

On October 1st, 1909, the Inventory of all property in Honduras other than mining property shows an increased valuation of $19,322.33 over 1908, this being due to the cost of the new Guadalupe Power Plant. Other parts of plant show a decrease in valuation, due to the lower price of silver, values being based on current rate of exchange.

Comparative working costs show a decrease in all departments during the year, excepting Surface Department, the total, however, being 36.091 Pesos per ton crushed, as against 36.655 Pesos for 1908.

Owing to the limited area of the Camp at San Juancito, conditions there are so overcrowded, that economical work is not possible; yet in view of the contemplated change of site to the mouth of the mine, only the most necessary expenses are made to maintain the Camp in working condition.

Your employes are taken care of in a far more satisfactory manner than heretofore, there being four Chinese cooks and a vegetable gardener to supply the table, while the shipment of beds and bedding has further added greatly to their comfort, and it being the intention to continue this policy of properly providing for the employes.

Respectfully submitted,

ERNEST SCHERNIKOW,
Secretary.

REPORT

OF

NEW YORK & HONDURAS ROSARIO MINING COMPANY

NEW YORK, DECEMBER 1st, 1910

OFFICERS 1910-1911.

W. S. VALENTINE, *President.*
S. HEIDELSHEIMER, *Vice-President & Treasurer.*
E. J. SWORDS, *2nd Vice-President.*
ERNEST SCHERNIKOW, *Secretary.*

BOARD OF DIRECTORS 1910-1911.

H. H. BABCOCK,
LEWIS L. CLARKE,
S. HEIDELSHEIMER,
FORREST H. PARKER,
MAXº F. SOTO,
E. J. SWORDS,
LOUIS F. VALENTINE,
W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1910-1911.

FORREST H. PARKER, *Chairman.*
LEWIS L. CLARKE,
E. J. SWORDS,
P. R. WEILER,
MAXº F. SOTO.

Report of the Board of Directors of New York & Honduras Rosario Mining Company

New York, December 1, 1910.

To the Stockholders:

On November 17th, 1910, this Company entered its thirty-first year of corporate existence. In past years your Board of Directors has successively reported to you the progression of the business, and in complying with this obligation at this time, it believes the progress made is proportionately greater than in any of the past years, not only in the physical development of the mine, per se, but also in the many improvements made, and in the progress in the erection of the new mill.

These improvements were planned after careful consideration of your finances, and the many thousands of dollars expended therein have been taken entirely from the earnings. No debts have been created and comparatively few dividends passed. This speaks well for the healthy condition of your Company, and the various reports hereto attached bespeak a brighter future than ever before.

THE MINE.

The General Agent's Report, supplemented by the Mine Superintendent's Report, is herewith presented. Special attention is called to these and comparison with former years invited. They report interesting features; show greater development and larger ore reserves than at any time in the past; they also show economy in work by decreased costs in all branches of the business.

THE MILL.

In anticipation of the building of the New Mill, your General Agent was instructed to make no further extensive improvements on the present mill, but to maintain same in workable shape only. This was done by patchwork and at very little cost, and in spite of its poor condition, a greater tonnage was passed through, and

the percentage of extraction higher than ever before. The end of this mill is not far distant, but it will be kept running until the completion of the new mill.

NEW MILL.

In our last year's report, you were advised that the Board of Directors had under consideration the building of this mill with more than double the present capacity. Once the plans were formulated for this herculean work, lines were laid for its active completion. Your Consulting Engineer, F. H. Minard, Esq., E.M., was sent on an extensive visit to the largest mining camps in the United States and Mexico to examine the newest improvements in metallurgical works. After a six weeks' trip, Mr. Minard brought to us the fullest information on modern reduction. Plans and specifications were drawn and submitted to the best known manufacturers in this country, and your Secretary was sent to Europe to investigate the builders in that country. After careful consideration of all the data, the mill was contracted for with American manufacturers, and the major part thereof has already been shipped, and the remainder is now in process of shipping.

In the meanwhile your representatives in Honduras were giving careful study to the location and making plans for the erection. This is now well organized, a great deal of the preliminary work has been done, and when the machinery is all on the ground the work of erection will proceed day and night. In last year's report your Board of Directors expressed its hope that this would be completed at the end of 1911; but the activity of your representatives on the ground shows promise that this time will be materially curtailed.

Were it only the erection of the mill proper, it would be comparatively a small proposition; but in connection therewith your necessities require the transferring of all of your business to the immediate neighborhood of the mill, which entails the erection of many buildings and residences for your various employees, or practically the building of an entire village within a limited stockade.

The expense of this great improvement will amount to several hundred thousand dollars; but it is anticipated that, when concluded, the future profits will be very much greater.

FINANCIAL.

The Treasurer's Report, presenting the financial condition of your Company at the close of the fiscal year, shows a healthy status. Our credit has been of the highest.

POLITICAL.

During the past year Honduras has passed through some very unsettled conditions. Several revolutions of small import were initiated during the year, but the existing Government has been able to maintain itself throughout, and your Company has had the co-operation of all members thereof.

Early in the year the Government began negotiations with large financial interests in this country for the refunding of its debt, in combination with a treaty with the Government of the United States for the supervision of its finances as a guarantee. These negotiations progressed favorably, and a final conclusion thereof was reached within the last few days. The financial commissioners of Honduras, who have negotiated this loan, have recently concluded the same, and it now only awaits the approval of the Congress of Honduras to become binding.

Whilst the settlement of its finances is of extreme import to the country itself, it is of specific interest to your Company, because it guarantees continuous peace, thus avoiding many delays that have occurred in your business on account of political unrest.

REPORTS.

Your attention is called to the reports hereto attached, all of which cover interesting detail of your business.

EMPLOYEES.

Your staff of employees has been materially enforced during the past year, and harmony exists amongst the chiefs of all departments, and your Company can congratulate itself on the intelligent and active work done by all of them.

Respectfully submitted,

W. S. VALENTINE,
President.

NOTE—Herewith are presented the most important facts as reported by the General Agent and Mine Superintendent.
All costs herein are given in silver currency, unless otherwise stated.

San Juancito, Honduras, November 26th, 1910.

To the President,
New York.

ANNUAL REPORT.

Dear Sir:

We take pleasure in submitting herewith the following resumé of the work done upon your properties in San Juancito, Honduras, during the fiscal year ended September 30th, 1910.

MINE.

The ore reserves estimated for the year show a total of 107,575 tons, including waste allowance of 24%. The value of the ore delivered at the Mill is calculated at $25.30 U. S. Currency per ton. By comparison with last year's figures the increase of both quantity and quality of the reserves is evident, and the presence of approximately 65,046 tons of high grade ore in the San Miguel Vein, augur well for the future of the Mine.

The Development Work on some of the upper levels was again subjected to a repetition of last year's delays on account of the widening of the Peña Blanca Tunnel and the Northwest Crosscut for the installation of the new electric haulage system, air lines, and the building of the new entrance to the Peña Blanca Tunnel.

In the Assay and Development sheets, forwarded monthly, you have been made acquainted with the progress on the different levels and veins, and in the following table we show the total number of feet advanced monthly and the cost per linear foot driven:

October	878.0	
November	1309.5	
December	913.0	
January	1101.5	
February	1131.5	
March	922.5	
April	911.5	
May	942.5	
June	1235.5	
July	1093.5	
August	1018.0	
September	1461.0	
Total	12918.	feet

Total cost of Development Work for year.....	pesos	202,303.96
Cost per linear foot driven.....	"	15.66

The new electric locomotives were made serviceable for hauling rails, pipe and other material with which to advance the work at greater speed, running as far in as the Main Waste Chute in Block 49, and, pending the widening out of the Northwest Crosscut through its narrowest section, the electric haulage installation will be completed.

During the past year explorations in undeveloped ground have been vigorously prosecuted, and the excellent results obtained are manifest in the ore delivered to the Mill from the new discoveries. The Crucero Group of ore bodies, discussed in detail in the Mine Superintendent's Report of last year, has grown to be the main producing zone of the mine, taking the place of the Candelaria Vein System. The Northwest Crosscut, driven in part by means of the old compressed air equipment, connected with the Crucero District and was carried through to the surface in August, thus partly solving the difficult problem of ventilation.

The San Miguel Vein has furnished the Mill with over 11,000 tons of the total ore mined during the year, and is the greatest high-grade ore producer in recent years.

With the adoption of suitable air drills, manned by competent drill men brought in from the United States, and with the aid of the new electric haulage system to facilitate the handling of the mined product on a more economical basis, the coming year should show a good return upon the amount invested in these improvements.

The Mine Superintendent's Report, annexed hereto, after a thorough examination and computation of all ore reserves, includes the results of the important development work now being carried on in the San Miguel Vein on the Upper 550 and Lower 300 Levels. As the report is replete in detail and discusses the present and future prospects of the entire mine, we need not now dwell further on this branch of your business.

MINING COSTS.

In our report of the previous year, 1909, we called attention to the fact that under existing conditions the lowest possible mark in our mining costs had been reached, but during the year closing September 30, 1910, owing to the greater tonnage delivered at the Mill, the cost per ton of ore mined was further decreased by 24 centavos per ton crushed. The total mining cost for the years 1909-1910 was as follows:

Labor	$525,948.78	**Supplies**	$177,672.38	**Total**	$703,621.16
or per ton	14.35		4.85		19.20
as against 1909,	14.29		5.15		19.44

The expenses incurred for stoping, tramming and timbering for the same period, compared with those of 1909, are as follows:

	1909	1910
Stoping	$5.89	$5.89
Tramming and Car	1.15	1.10
Timbering	2.31	1.88
Totals	9.35	8.87

As in the previous year large factors of our mining expense have been keeping the old work accessible, general underground repairs, and the recovery of old workings, in which an enormous amount of timber was consumed. Another item of expense during the year past has been the employment of foreign machinemen to run our drills, owing to the higher wage commanded by this class of labor. The reduction in expense expected through the installation of the new Guadalupe Power Plant, and its substation at Peña Blanca, while not in evidence in the actual cost figures as yet, nevertheless, this new plant, by providing power and ventilation, has been the means of extending operations into territories formerly inaccessible. This is shown by the increase in tonnage over the previous year, and which is discussed under another heading.

REDUCTION WORKS.

The Mill crushed a total of 36,634.55 tons of ore, exceeding the total tonnage for the year 1909 by 3,854.27 tons, and rendering an actual value of $857,008.59, an increase of $106,628.94 gold over the previous year. The actual tonnage given above is the highest on record. Product of the Reduction Works was shipped to New York in the form of 1,189 cases of Cyanide Precipitates and 5 bars of bullion, the latter obtained from metallic residues.

Hereto we show the operations of the Reduction Works during the year.

Theoretical Value of Ore Delivered at Mill During Year 1909-1910.

1909-1910	Dry Tons Crushed	Battery Assays Silver	Battery Assays Gold	Total Oz. Silver	Total Oz. Gold	Value of Heads U. S. Currency
Totals	36634.55	40,83	.312	1,495929,01	11441,11	$976786,68
Totals for prev. year	32790.28	33,91	.539	1,112039,51	17699,78	$910031,58

PRODUCTION FOR 1909-1910.

	Total Produced Oz. Silver	Total Produced Oz. Gold	Value of Product U. S. Gold	Percentages of Extraction Silver	Gold	Total
Totals	1,289173,87	10621,082	$857008,59	86,17%	89,68%	87,73%
Totals for prev. year	975528,82	13130,762	$750379,56	87%	74,18%	82,45%

NOTE: Silver in this statement has been figured at 50 cents an ounce, and Gold at $20.00.

The results on the extraction of values from the product treated show a total percentage of 87.73%, an increase over the previous year of 5.28%. This better percentage of extraction was partly obtained by careful study and analysis of the different ores and the addition of six small Pachuca tanks to our Cyanide Plant, thus proving the value of compressed air in the agitation of the pulp, even on such a small scale. The consumption of chemicals was greater owing to the refractory nature of the higher grade ore treated.

This department met with no other delays than those occasioned by floods and washouts during the rainy season and those that the necessary running repairs actually demanded.

CLEANING PLANT AND TRAMWAY.

Repeated shutdowns of the Sorting and Cleaning Plant at Rosario, caused by the old and worn-out installation, demanded that a more or less general overhauling be made. The timber supports under the ore bins and main structure were strengthened, and a new ore crusher of the Gates gyratory type was installed.

Eleven wooden towers of the wire rope tramway were rebuilt; and the proportionate amount of steel cable charged against its operation during the year amount to pesos 10,599.70.

This plant handled a total of 40,757.51 wet tons of ore at a gross expense of $55,027.86, or $1.50 per ton crushed.

SURFACE DEPARTMENT.

This Department comprises all the operations not included in the Main Departments, Mine, Cleaning Plant and Tramway and Mill. Likewise all expenditures not directly applicable to these are herein taken care of. This Department is responsible for the construction and maintenance of roads, repairs to all plants and buildings, and, in fact, for all the work done on the surface and new construction.

The total cost of this branch for the year amounted to $192,-655.55, or $5.25 per ton crushed.

RECAPITULATION OF COSTS.

A Cost and Revenue Sheet giving the movement of labor and supplies for all branches of your works during the entire year is annexed hereto.

NEW ROSARIO WORKS.

From the time it has taken to formulate plans for the construction of new Reduction Works at Rosario, and the consolidation of your entire plant at one place, and despite the fact that your staff at San Juancito has devoted the greater part of its time to the careful study of the new move, only a vague idea can be had of the magnitude of this undertaking. Considerable correspondence passed back and forth between your headquarters and the Mine before definite conclusions were reached.

We appreciate that the home office has been extremely active in the selection, purchase and shipment of the machinery within so short a time, but unfortunately we were unable to collaborate by perfecting our plans for its installation in the same period.

During September just passed, we were favored with your final views, and the report of F. H. Minard, Esq., E.M., and acting thereon we submitted our final plans of the various arrangements as proposed by us. These were immediately accepted, and we were ordered to proceed with the work at once.

Owing to the topography of the ground and the limited space allotted for our buildings the new mill site was selected only after a series of extensive surveys. Even on the site selected by us, and which offers greater advantages for a less costly installation, deep excavations and massive retaining walls will be required to protect the plant from landslides. The foundation plans and specifications are now awaited, and upon their receipt the work will be vigorously prosecuted. Already much preliminary work has been started, notwithstanding the fact that the heavy rains have retarded the field work considerably.

The consensus of opinion does not altogether point in favor of one main building for quartering your employees. Whilst true that consolidation of employees' quarters is a thing long sought for, and that by moving the Mine staff from its present quarters to the main residential section more houses will be required, the cost of building those two or three-room houses, as compared with the time, labor and material required for the erection of the rooming house along the lines and of the dimensions called for in the plans you have submitted, condemns the latter project throughout.

Suitable ground has been reserved for the Club and Mess-house comprising a spacious dining room, billiard room, gymnasium, library and bowling alley, located away from the noise of Mill and shops, and commanding a splendid view, where at best your staff can spend the evening hours in recreation and wholesome amusement.

All houses are to be constructed upon a thoroughly sanitary basis, and special stress is to be laid on the question of their convenient location and comfort.

Since your first advice that over 490 tons of freight will comprise the first shipment, we have been actively communicating with the greater part of the freighters on the South Coast, and the handling of this first and successive installments of freight will prove, perhaps, the most difficult task in connection with the new construction. We can easily see that it will be the largest amount of freight ever handled by this Company at one time.

In the foregoing we have limited ourselves to the more important facts. The reports already sent you give considerable detail, and those to follow will acquaint you with what is being done and the progress of the work in general.

SAN JUANCITO POWER PLANT.

The motive power required to drive the new equipment at Rosario could not be furnished by the Guadalupe Power Plant, and therefore a new hydro-electric installation became necessary. The San Juancito Power Plant is located in the heart of the works at San Juancito, and will have a maximum output of approximately 1,200 horse-power during the months when the supply of water is abundant.

The waters of the Escobales River, and two of its tributaries forming the first source of supply, and those of the San Juancito River the second source, will be conveyed through 3.20 miles of wooden flume to a point of 1,355 feet above the power house, and thence dropped through 4,500 feet of pressure pipe to two Pelton water wheels. The station is equipped with two Westinghouse alternating current generators of 350 kilowatt capacity each, and they will be run in synchronism with those of the Guadalupe Plant. A branch line will carry the current to the main transmission line, which, in turn, will be tapped at the site of the New Rosario Works and the current distributed there to the various Departments.

The construction of this plant, as per cost sheet already forwarded, showing the total of each construction operation, has entailed an expenditure of $76,580.08 to September 30, 1910, and its completion is promised for the first of January, 1911. Arrangements are now being made to run the Mill, Cyanide Plant, Rosario, and other Departments receiving power at present from

the Washington Plant, from this new station, while the former is shut down during the construction of the new Aguacatal Flume; which flume will carry the waters from the second source already discussed. The lumber is now being prepared, but owing to the necessity of frequent rehandling, and the hauling distance being so great, we do not anticipate its completion until the latter part of February. In the meantime it is calculated that the water from the Escobales River alone will be sufficient for the requirements of the new San Juancito Plant.

LANDS AND TIMBER.

The underground workings of the Mine are increased year by year to such an extent that the consumption of round and sawed timber is becoming an item of great importance. The scarcity of timber for underground requirements warranted the expenditure of $6,138.39 to September 30 last, for the construction of a new road, which starts from the Crucero Portal at Peña Blanca Level, and extends for a distance of 1¾ miles to the proposed site of the mine sawmill. This road opens up an unlimited supply of good hard wood, and its proximity to the Mine portal ensures the ready delivery of timber at reduced price.

The costly method in vogue for many years of dragging squared logs to the sawmill at San Juancito, and the enormous waste resulting from the hewing of these logs in the woods, also justified the expenditure of $40,071.94 for the construction of 11¾ miles of road, which, in addition to facilitating the delivery of timber to the Mine, was the means of conserving our forests. The above expenditure includes the cost of a new and complete sawmill outfit erected in the heart of the pine lands and the acquisition of 1,000 hectares of national ground. The lumber is hauled on wagons and delivered to the works at San Juancito and at Rosario for new construction work.

GENERAL.

In the report submitted last year we dwelt to some extent on the condition of the Mill, and, needless to repeat, considerable more patchwork and repairs were necessary this year to prevent shutdowns.

New blacksmith and machine shops, fitted out with modern labor-saving appliances, were erected at the Peña Blanca adit of the Mine during the year. These buildings are fireproof throughout and the installation offers every convenience for the repair of machine drills and general mine equipment.

The management at San Juancito has enjoyed the full co-operation of every department, and due credit is herein given the various heads for the efforts displayed toward the accomplishment of the year's work along the most efficient and economical lines.

In conclusion, allow us to express to the officers and Board of Directors our appreciation of their hearty collaboration and material support, trusting that the results as outlined in the foregoing will merit their approval, and with best wishes for a successful and prosperous new year, this report is

Respectfully submitted,

L. F. VALENTINE,
General Agent.

NEW YORK & HONDURAS ROSARIO MINING COMPANY.

Cost and Revenue Sheet for Year Ending September 30th, 1910.

COSTS:

DEPARTMENTS	LABOR		SUPPLY		TOTAL	
	Total	Per Ton	Total	Per Ton	Total	Per Ton
Mine	525,948.78	14.36	177,672.38	4.85	703,621.16	19.21
Tramway	37,034.37	1.02	17,993.49	.49	55,027.86	1.50
Mill	75,015.35	2.05	258,346.03	7.05	333,361.38	9.10
Surface Improvement	169,687.85	4.62	22,967.70	.63	192,655.55	5.25
Totals	807,686.35	22.05	476,979.60	13.02	1,284,665.95	35.06

PRODUCTION:

Total Tons Crushed During Year 1909-1910: 36634, $\frac{55}{100}$

Oz Silver Produced	Oz. Gold Produced	Production Per Ton Oz. Silver	Oz. Gold	U. S. Value Total	Production Per Ton	Pesos Value @170% Total	Production Per Ton Pesos
1,289,173.87	102,610.82	35.19	.289	$857,008.59	$23.39	2,313,923.19	63.163

EXTRACTION:

Battery Assays		Tailings Assays		Percentages of Extraction		
Silver	Gold	Silver	Gold	Silver	Gold	Total
40.83	.312	5.64	.022	86.17%	89.68%	87.73%

San Juancito, October 1st, 1910.

SAN JUANCITO, HONDURAS, C. A., November 26th, 1910.

To the General Agent, San Juancito:

DEAR SIR:

We submit with pleasure the following report describing in brief, under the different headings, the results of operations in the mines and mineral concessions of this Company during the year ending October 1, 1910:

ORE RESERVES.

The ore reserves for the coming year show 86,911 tons of ore in place, or 107,575 tons of ore, including about 24 per cent. waste which, due to the narrowness of the veins, must be mined with the ore. The tonnage is calculated on a basis of 13 cubic feet of vein matter in place per ton. The value per ton, as delivered to the mill, is $25.30, United States currency. The quantity, value and location of ore in each vein are shown in detail on the accompanying ore-reserve sheets and longitudinal sections.

ORE EXTRACTED.

The quantity of ore delivered to the mill is as follows:

Total cars of wet ore	63,928	
Average capacity of cars	.058	tons
Wet tons delivered to mill	37,066	
Net tons, dry, actual weight at mill	36,634	
Difference due to moisture (about 9%)	432	tons

The table hereto annexed shows the amount of ore produced by each vein.

DEVELOPMENT.

Table "B," hereto annexed, shows in detail the amount and character of exploration work done in each vein.

A brief discussion of the results obtained from development therein noted will be found under the following headings:

CANDELARIA VEIN.

This vein, which for over three years was the source of the greatest tonnage and high value, is now exhausted. Most of the 3,388 linear feet of exploration work done during the past year has been confined to the lower levels in order to penetrate

ore-bodies, the existence of which has long been known, but which could not be profitably worked unless properly exposed. These ore-bodies are each of but small extent; they constitute the outer edge of the rich mineral zone so productive in the past, but, collectively, they form a very substantial addition to existing ore-reserves.

Very little development was done at the L. 650 level in this vein during the past year, for the reason that territory giving quicker returns on development has been plentiful and, naturally, preference was given thereto. The L. 650 development, however, is by no means unimportant, and it will be prosecuted at the proper time.

The Candelaria vein, of course, contains considerable quantity of low-grade ore and, when the new mill is in operation, will once more become a large and important producer.

The Peña Blanca electric haulage system has already been extended into the Candelaria workings, and all that is now lacking is the connection with the switches at Chute No. 51. When this connection is made we will remove all the waste fillings from the old stopes known to be in good ground and refill them with the low-grade ore mined from the upper levels. By keeping count of the number of tons of waste run from these stopes we will know exactly their capacity and hence the quantity of broken ore they can hold. When the new mill starts we expect to have all these stopes filled with broken ore, which, judging from the size and extent of some of them, we dare say will be several thousand tons.

CATALINA VEIN.

Outside of keeping the workings open, no other work has been done on this vein during the past year. The ore reported in last year's report is still intact and will probably be stoped this year. The vein was intersected at the zero level by a drift in the West vein. No important values were encountered. This, however, was to be expected, as the first ore-body which occurred at the Peña Blanca level lies some distance away from the West vein. Drifting will shortly begin with machine drills, and when the vicinity of the ore occurrences at the Peña Blanca level is reached we are of the opinion that a good quantity of pay ore will be found.

COLONIA VEIN.

The ore exposed by the cross-cut run about eighteen months ago at the L. 300 level of the Rosario Mine has proved an important addition to our high-grade ore reserves and has been of material assistance in maintaining the battery grade.

The Colonia vein throughout the entire year has been a steady and, for its size, heavy producer, yielding 4,769 wet tons, or about 1,000 tons more than was obtained in any previous year.

The ore still in place and shown on the Ore Reserve Map is of lower grade than any heretofore mined from this vein, but, by careful sorting and economical mining, we believe it will still yield a fair margin of profit.

CULEBRA VEIN.

The production of 1,095 wet tons came from the U. 500 and U. 350 level stopes, the former producing the greater tonnage and the latter the richer ore. U. 500 stope, Block 49, is about exhausted. There is still some ore left in the U. 350 stope, which will be taken out as soon as the flow of water decreases.

It is possible that the vein in which we have been working at the U. 350 level is, after all, not the Culebra, as you will perhaps remember that this vein does not trace out as a continuation of the Culebra vein on the U. 500 level. (See 1909 Annual Report.) Further work will, therefore, be done to find out exactly just what has occurred, and it is probable that this may lead to the location of the true Culebra vein.

BUENA VENTURA VEIN.

Although only 92 tons were reported in the 1909-1910 reserves, in stoping this ore we were extremely fortunate to run into a good pocket of high-grade ore which up to date has produced 730 wet tons. This pocket is as yet not exhausted, and very likely even a greater tonnage than reported on the Ore Reserve Sheets herewith may be obtained. It became necessary to shut down this stope while the 24-inch gauge track was being laid at the Peña Blanca level. Operations, however, will soon be resumed.

SOCORRO VEIN.

Of the 701 tons produced by this vein in the past year, the greater amount came from the U. 500 level. The stopes on the U. 500 level are now within a few feet of the U. 600 level, and, therefore, will shortly become exhausted. There is still a small quantity of high-grade ore in the U. 350 stope. We have ore blocked out in the U. 600 and U. 700 stopes, but this is of rather poor grade. Nevertheless, on account of its greater width, it can be mined at a small margin of profit.

As the possibilities of further development of this vein are practically nil, no work of this nature was done during the past year.

In all the Socorro stopes there appears to be a vein exposed, the direction of which is at right angles to the Socorro. It may be that this vein is the San Vicente. In places it has a width of as much as 1.5 feet, but at no point any distance away from the Socorro does it appear to carry stoping values. Now that the development of the Candelaria vein on the upper levels has been completed we will endeavor to further investigate this vein off the Socorro, as the possibilities for ore occurrences should be of the best, it being in a highly mineralized zone and in the close vicinity of such veins as the Socorro, North, Buena Ventura, Guadalupe and Candelaria.

NORTH VEIN.

Only 150 wet tons were taken from this vein. Outside of a few stray bunches of high-grade ore, most of which is very narrow, there is but little ore left. Here, also, the chances of returns from development are very small, and consequently no work outside of stoping was done during the past year. However, there is one remaining possibility, which, upon investigation, may lead to an ore-body—i. e., by the driving of a raise from the U. 600 stope. The only thing in favor of this is that the territory above the U. 600 level is rather extensive.

NORTHWEST VEIN.

Of the 387 tons of ore blocked out last year about 44 tons were stoped. This ore came from pillars on the L. 100 and

L. 200 levels in Block 52. Many of the stopes which were recovered in the past year contain small quantities of high-grade ore. The ground is very hard and the vein very narrow, but due to the high values this ore can be mined at a good margin of profit.

In the near future it is our intention to continue, by means of machine drills, some of the old stopes which were stopped more on account of the hardness of ground than any depreciation in values. These stopes are all dry and the character of the ore is such as to render it readily distinguishable from the wall rock and, consequently, efficient sorting can be done, and, we believe, much good ore will be obtained.

GUADALUPE VEIN.

Development of this vein, which consisted in driving the L. 300 heading to the East and a raise to the L. 200 level, opened up some low-grade ore. We will extend the L. 300 heading about 300 feet further to the East into Block No. 46, in order to get below the rich pocket productive at the L. 200 level. This work will bring the heading well into the Candelaria vein.

A raise is being driven from the L. 650 level at the junction of the Rosario-Guadalupe-West veins. The average width of the vein in this raise is about one foot, but no stoping values have yet been encountered. This locality appears to have been quite productive at the L. 400 level, and as the raise has now advanced about 100 feet a change should soon occur.

The 594 wet tons extracted came principally from the L. 400 level. No stoping is being done here at present, as there is no immediate necessity for the ore.

NUEVA VEIN.

As stated in last year's report, the faulting problem, which retarded development of this vein for some time, has been worked out, and consequently the vein was found at the zero level. The 748 wet tons of ore extracted this year all came from the zero level. This ore was very rich and wide and proved a valuable aid in maintaining the battery grade. At present the vein in the above stope is very narrow and not so rich, but this may prove only to be a pinch in the vein, and a raise through it

may again expose a vein of better width and value. The driving of the zero heading in an easterly direction has continued throughout the entire year, but outside of the above-mentioned stope no ore of stoping value has been found. As soon as convenient the vein will be exposed and developed from the Peña Blanca level.

Before the ore blocked out on the L. 400 level can be stoped two raises will have to be run, as the ore which exists in the floor of the L. 300 level does not appear to extend to the L. 400.

SPHALERITE VEIN.

This is a stringer of the Nueva vein and exists only at the L. 300 level. One hundred and five wet tons were obtained from pillars during the past year. There is still some ore left, but as its extent is very uncertain none has been blocked out. It is very probable, however, that from 300 to 400 tons can still be obtained.

WEST VEIN.

The entire drift of the Peña Blanca level has been widened and retimbered to proportions which will admit the entrance of the locomotive. The new 24-inch gauge track and a 6-inch compressed-air pipe line are in place. As soon as connection is made with the general terminal at Chute No. 51 drifting on the vein will begin. The development above the Peña Blanca level will be carried on along the lines outlined in last year's annual report. We believe that the chances for ore, especially at and above the Peña Blanca level, are favorable, if not in the vein itself, in the territory it would penetrate.

ROSARIO VEIN.

The heading East on the L. 400 level has been extended well into Block No. 26. Former Ore Chute No. 26 was intersected, and past it, a stope which, so far as at present known, is at least 300 feet long, and it appears that former operations must have worked it through a winze sunk from the L. 300 level. Unfortunately, the drift which we ran cut this stope at the very bottom, and but little ore was obtained. On sampling the floor the results showed a vein of good width (about 2.5 feet) and fair value,

and if these conditions continue for any distance below the L. 400 level perhaps several thousand tons of ore may be obtained. As this ore is very close to Chute No. 26, which extends to the L. 650, or Rosario level, we are endeavoring to recover it, but thus far have met with little success, as it appears to have been the dumping place for old lagging, rails, pipe and timber, and it is material of this nature, and not the rock, that is causing all the trouble.

Work still further to the east will be resumed as soon as Chute No. 26 is either recovered or abandoned.

CRUCERO GROUP.

At the time of last year's annual report the total production from this section amounted to about 18 tons. This ore came from the Capitana vein. Two weeks before said report was submitted the San Miguel vein was struck. Although its development then consisted of but a few feet, it showed such strength and character that we felt justified in making what at that time must have sounded as very radical predictions. (See page 37, 1909 Report.) That these predictions have been more than fulfilled is shown by the following figures, which are self-explanatory:

Vein	Ore found in year 1909-1910	Ore extracted in year 1909-1910
San Miguel	65,046 tons	13,448 tons
Capitana	6,763 tons	402 tons
	71,809 tons	13,850 tons

As was mentioned under the heading of these veins, the actual development of each will be concluded during the coming year.

We are now devoting our energies in driving a cross-cut similar to the well-known "Northwest Cross-cut." It is projected to prospect territory over 5,000 feet in extent, in which occur several veins, among them being the "Los Cedros," "San Vicente" and "San Pablo." This cross-cut is being driven large enough to permit of electric haulage and on a one-half per cent. grade. The question of drainage is also being taken into consideration, as the cross-cut is heading toward the "Rio Hondo" District, and even before that is reached it will pass under several good-sized mountain streams.

The above cross-cut starts at the U. 150 or Peña Blanca level and is virtually a continuation of the "Northwest Cross-cut." At present the bearing of the new cross-cut is North 47 deg. 30 min. West, but it is probable that this course will be changed when certain information is obtained from a topographical survey soon to be made of the Rio Hondo section.

The above cross-cut will hereafter be referred to as the "Crucero Cross-cut." It will ultimately be the largest single undertaking of any kind ever attempted by this Company, either at the surface or underground. The question of artificial ventilation is being taken into account, as raising to the surface will be out of the question after a depth of over 1,000 feet is attained, and, therefore, the cross-cut is being made large enough to admit 24-inch ventilating pipe, if necessary. In prosecuting the work two machines are used to drill a round of holes, and at present, although the heading is in the hardest rock in the mine, we are going ahead at the rate of over 150 feet per month. The best equipment and foreign labor is on this work, and no expense is being spared, as speed is the main object. Should the ground become softer we aim to make at least 200 feet per month. If there be no delay in this work, and we are able to obtain 100 pounds air pressure in the dry season, the heading should be in ore-bearing territory by this time next year.

As development in the Capitana and San Miguel increased and the U. 350 and U. 550 Crucero levels were started, ventilation of the various headings and stopes became a question for serious consideration. The Northwest Cross-cut was, therefore, continued to the surface of the Crucero side of the mountain and the connection made last August. This immediately solved the problem and no more trouble has been experienced with foul air. We were also able to start more development by being able to dump waste on the Crucero side from several headings. While this connection assures good ventilation as far as the Crucero group at the Peña Blanca level is concerned for some time to come, it will not serve the purpose as well when the headings at the U. 350 and U. 550 Crucero levels advance further. However, before this happens, we expect to have the U. 150 Capitana raise, Block 56, broken through to daylight. Only 250 feet are lacking, and this should be driven within three months.

CAPITANA VEIN.

The amount of drifting and raising from date of discovery to December 27, 1910, consists of 2,438 linear feet. This development has shown that the vein contains rich pockets, especially southeast of the Northwest Cross-cut. It is quite narrow, averaging barely one foot in width. It occurs in hard ground, and, generally, there appears to be no line of cleavage between the walls and vein matter. The vein filling, consisting principally of quartz, contains chlorides of silver, and the gold appears to be associated with tellurium. The Capitana is distinctly a gold vein, and assays of samples ranging from 2 oz. to 25 oz. gold per ton are quite common, but the places wherein these occur are only two-tenths (.2) or three-tenths (.3) of a foot in width. Owing to the narrowness of the vein and its adhesion to the walls a large percentage of waste is broken with the ore, and the tonnage mined is correspondingly small; but, nevertheless, the stopes we are now working contain such high-grade ore that, although they produce in all only four or five tons per day, this quantity raises the battery grade from .06 to .09 oz. gold per ton.

Recent development at the U. 350 Crucero level in a southeasterly direction indicates that some of the rich stopes at the U. 150 or Peña Blanca level will extend to the U. 350, and for some distance above it. The development of this vein will be completed within the next year, as it does not appear to extend for any distance to the northwest, and the territory in the opposite direction is limited by the Guadalupe and Candelaria workings, the vicinity of which has already been reached at the Peña Blanca level. The number of wet tons of ore produced last year was 402. The production during the coming year will, of course, be much heavier.

SAN MIGUEL VEIN.

This vein was found in the latter part of October, 1909, and from that date until December 27, 1910, 2,465 linear feet constituted its development and 13,448 wet tons its production.

Development at the U. 550 and L. 300 levels has been partially successful. The vein was again apparently exposed at the U .550 level on October 20, 1910, and development started in a stringer of good dimensions, but practically valueless. It (also reported on the Ore Reserve Sheets attached hereto) is

soon became apparent that this was not the San Miguel and that further drifting to the northwest was necessary to locate it. Upon doing this work the true vein was found, and, while not as rich as the U. 350 and Peña Blanca levels, it contains good stoping ore throughout the entire 100 feet, which, up to date, constitutes its development at this level. During the latter part of November, 1910, the vein was again exposed at the L. 300 level. Here it is very badly broken up into numerous stringers, which do not appear to carry values. There is not yet sufficient development to indicate definitely what the geological conditions are. We are of the opinion, however, that at this level the hopes for ore occurrences are rather meager, and if a change for the better does not soon occur, further development will be stopped.

It will be noted that, in figuring ore reserves, the extent of ore below the Peña Blanca level is assumed at 200 feet. While this is merely a surmise, especially as nothing was found at the L. 300 level, we believe it to be sufficiently correct to be included in the ore reserves.

We have come to the conclusion that it will be more economical to sink a shaft and remove the ore below the Peña Blanca level by hoisting to this level and transporting it to the chutes by electric haulage rather than by taking it out through a chute at the L. 300 level and handling it from there. At the L. 300 level some of the track is in very bad shape and will have to be replaced if very extensive hauling is to be done. Furthermore, all ore from the Colonia Mine is handled at this level as well as all waste from whatever development is being done. If, on top of this, a substantial tonnage were called for from the San Miguel, part of which would have to go through a chute at the L. 300 level, it would hardly be possible to handle everything without first making elaborate preparations. Our hoist can handle from a depth of, say, 250 feet, at least 100 tons per day of ten hours, and outside of the power used the only other expenses would be for a hoist-man at, say, 4 pesos, and top-man, at 2.50 pesos per shift, and such supplies as might be consumed.

Past development has shown enough to enable us to form a fairly accurate opinion as to the general outline of the San Miguel ore-body. It is elliptical in shape. The major axis is

probably some 950 feet in length, extending, so far as pay ore is concerned, from a point about 250 feet below the Peña Blanca level to about 100 feet or more above the U. 550 Crucero level. The minor axis appears to be at about the U. 350 Crucero level and is about 550 feet in length. The entire body has an inclination to the north. At the north and south extremities of the above body there appears to have been extensive faulting, and it is undoubtedly due to this that the lateral extent of the ore is limited. Going further to the north and out of the faulted region another ore-body, some 200 feet in length and heretofore known as the "San Juaquin," occurs. This, we are inclined to believe, is now the San Miguel, which, due to the afore-mentioned faulting, has been thrown to the northwest and out of line with the general direction of the San Miguel vein. In drifting to the south, when the faulted territory is reached, the vein continues in a badly broken-up state, but carries no values. This may be due to the fact that here, also, a radical change in the rock occurs, the character of which may not be favorable for ore deposition. On the whole, while the faulting to the south is much more extensive than to the north, the movement appears not to have been of sufficient extent to completely cut off the vein.

By inspecting the general plan of the mine workings it will be observed that the San Miguel is very nearly at right angles to the West vein. By driving the South heading, San Miguel, the West vein would be intersected in about 800 feet and at a point about 100 feet back, or to the East, of the U. 150 West vein heading. Now, it is an established fact that the West vein loses its strength and values as it enters a badly faulted region, which begins at about the place where the San Miguel intersection should be. It is our theory that the South faulting of the San Miguel extends to the West vein, and, therefore, instead of two independent faults, one in the West and the other in the San Miguel, there is only one. It is undoubtedly due to this fact that as soon as faulted territory was reached the strength and values of each vein disappeared. Assuming that there is only one fault as described, we know, then (so far as the development of the West and San Miguel veins is concerned), its lateral extent from what has happened in these two veins and,

more or less, its vertical extent above the Peña Blanca level from past development in the West vein. It will be remembered that the West vein headings above the Peña Blanca level were all stopped on reaching faulted ground which had undergone sufficient movement to entirely break up and cut off the vein. Assuming the above theory to be correct, there is but little possibility of ore occurrences between the present south headings of the San Miguel and the West vein, and consequently no development is being done in this direction. The western extent of the San Miguel West fault is not known, but that it extends at least 300 feet is clearly indicated by development in the West vein at the U. 500 level, where over 400 feet of drifting in a westerly direction was carried on in baldly broken-up territory. We think the western extent of the San Miguel West fault is not as great as its Southern extent and, therefore, we have good hopes of again finding the West vein when uniform ground is reached, and there is no reason why the vein then should not have its usual strength and values.

As yet but little has been done toward developing the territory wherein the surface workings occur, as up to a short time ago this locality was only accessible from the surface. Now that the Peña Blanca-Crucero connection is complete, and compressed air, electric haulage and other conveniences are at hand, rapid development will begin. On making an inspection of the surface workings a vein fully sixteen feet in width was discovered, samples of which gave returns of about $18.00, United States currency, per ton. In some of the old works stoping has been done in stringers both on the foot and hanging walls, and the ore must have been very rich, as the stringers are not very wide. The value of $18.00 was obtained from that portion of the vein existing between two of the stoped-out stringers. Naturally, we do not look for very much high-grade ore from this section of the San Miguel vein, but from the general appearance of things we are confident that many thousand tons of ore suitable for the new reduction works will be developed during the coming year.

Development of the San Miguel vein will be concluded within the next ten or twelve months; the succeeding work will be mostly of a nature required to further open ore-bodies, the existence of which is already known.

AURORA CONCESSION.

Development of this concession consisted of 417 linear feet of drifting in several veins and stringers cropping at the surface. Up to date nothing has been found. Such work heretofore done shows that it was started too far down the mountain and, therefore, future work will be devoted to a higher elevation.

TOPOGRAPHY AND GEOLOGY.

The topographical survey started about a year ago assures the exact location of the many boundaries of the property, the corners of which are tied to a primary triangulation system. All elevations are referred to mean sea level, from which a line was run. In addition to the above a contour map is being made of all territory within the boundaries and of important sections of districts, as the "Valley of the Angels" and the "Aurora Mine." While in planning this survey this was not in mind, we believe that we will have valuable data regarding other veins and vein systems, which data, while perhaps of no immediate value, may be very desirable in the future. The map is made to a scale of 1 inch to 1,000 feet, with a contour interval of 20 feet. A map to this scale can at best only embrace the general features of topography, and for underground purposes is too small. The topographical engineer in charge of the work assures us, however, that his work is being very carefully done, most of it being rechecked by special check surveys, and that he can make enlargements of any sections that we may desire to the mine map scale which will be correct for all underground purposes. Three-quarters of the survey has already been completed and the remainder should be finished at the end of the dry season now upon us.

Another important point which we have had in mind for some time is that something should be known of the geology of this district. Being in daily contact with the existence of things as left by Nature, we have naturally formed a theory as to ore occurrences, veins and vein systems of this section, and in some cases have stumbled upon the truth, which has been, and is, of great value in outlining development, predicting the future possibilities of some veins and in estimating ore reserves.

In this district the ore occurs in igneous rock, which lies unconformably on top of shaly limestone. This limestone has a decided dip to the northwest. So far as is known, two great faults or breaks occur, which affect both the sedimentary and igneous rocks. Escobales Gulch was presumably formed by one of the faults and San Juancito Gulch by the other. It is the writer's opinion that the limestone is not very thick and that it, in turn, lies ON TOP of an igneous formation. This opinion is further strengthened by several observations made of the mining district of the "Valley of the Angels," where, it appears, that the igneous rock in which the ores of that district occur is THE ONE which lies *under* the San Juancito limestone. At the "Valle" we have examples of limestone between two igneous formations, each of which is ore-bearing, while at San Juancito, due to the faults above referred to, no igneous rock below the limestone is seen.

If the above theory is correct the thing to do is to go through the San Juancito limestone until the underlying igneous formation is penetrated, and if this is found to be the same as that underlying the "Valle" limestone there is no reason why ore should not be encountered in the San Juancito formation.

From our study of the Rosario veins we have come to the conclusion that possibilities for ore from any veins while in the limestone are very poor, consequently no development is being done in this formation. On the other hand, the chances for ore at the contact of the igneous and sedimentary rocks are rather good, and whenever a surface vein is discovered in the limestone we try to follow it until this contact is reached and develop it from this point in the igneous formation.

In order to get all the geological facts together so that they may be of still further use in shaping future development, we recommend that a trained geologist be sent, preferably one from the United States Geological Survey, so that geological sections of the more important regions can be made. A man who understands this business thoroughly should be able to furnish the information required within eight months. He would be enabled to carry on his work under most favorable conditions, having at his command very complete maps and notes of the surface and under-

ground workings. We could utilize the services of a geologist at once, as this is the most favorable time of the year in which to do work of this kind.

Should further geological investigations strengthen our theory that the "Valle" igneous ore-bearing rock can be looked for under the San Juancito limestone in the vicinity of San Juancito the best and most economical method of prospecting this formation would be by means of a diamond drill. Prospecting of this nature should be done in the close vicinity of, say, such veins as the "Rosario," to see what occurs in this vein, should it penetrate the igneous rock below the sedimentary, and we have many reasons to believe that it does.

COMPRESSORS AND ELECTRIC HAULAGE.

Compressors.

The Peña Blanca Air-Compressors have been in operation more than a year and we are very pleased to state that they have given perfect satisfaction. There has been no shutdown which could in any way be laid to either defect, poor workmanship or construction.

The underground pipe lines have been replaced by those of larger capacity, and in general the piping system has been greatly increased.

Electric Haulage.

The electric locomotives at Rosario, while they have readily handled the ore and waste sent to this level, are in bad shape and it becomes more difficult each year to keep them in good running order.

We are very glad to say that the widening of the Peña Blanca level to proportions which will admit the 24-inch locomotives is very nearly completed. The only section which remains to be widened is that in the Catalina vein.

The 24-inch track equipped with 35-lb. steel rails is in place in all the principal haulage-ways and has been extended to the surface at the Crucero portal. The locomotives are now able to run as far as Chute No. 51 and also haul dirt from Waste Chute No. 49.

GENERAL REMARKS.

All accessible old workings have been resurveyed and sampled and the results have been recorded on our maps and assay plans, which are now more complete and comprehensive than heretofore.

All of the surveying for flume and pipe lines, etc., for the San Juancito Power Plant has been taken care of by the Engineering Department, as well as the designing of the new hotel and club-house and living quarters. As the new construction advances the scope of the Engineering Department will be further increased.

The cable tramway has operated at its usual efficiency and is easily handling the increased tonnage required at the mill. The Rosario sorting plant, as you know, is in bad shape, the timbers supporting the bin being rotted.

Throughout the year the most important development was executed by foreign drillmen. We have had this year eleven foreign drill men, of whom eight are still with us. The men recently engaged from the Cripple Creek District are proving exceedingly efficient. Two of them are driving the "Crucero Cross-cut" at the rate of 150 feet per month, and two more are at the Lower 100 Candelaria level, Block No. 37, where a similar footage will be made. We find that the foreign drill men have nothing but praise for the native miners who are assigned to work with them, and the best of feeling prevails among them. By working both classes of labor together we have been enabled to train to a fair degree of efficiency several promising young natives who are anxious to better themselves.

After considerable study it has been found advisable to make the interval between levels 200 instead of 100 feet in laying out the workings in all new territory. This has already been done in the development of the "Capitana and "San Miguel" veins; and while this might not convey as much information about a vein as is obtainable by using 100-foot intervals, nevertheless, sufficient information is afforded by the 200-foot intervals for all practical purposes and at considerable saving in cost of development, while the operating costs due to the greater interval between levels are no higher.

The 107,575 tons of ore, valued at $2,721,437.00 (United States currency), blocked out and shown on the longitudinal sections submitted herewith, and also reported on the Ore Reserve Sheets, we believe to be the greatest reserves heretofore shown in the history of the mine.

In the "San Miguel" vein alone 65,046 tons of ore, valued at $1,538,158.00 (United States currency), were exposed in the past year.

Another new vein, the "Capitana," has ore reserves amounting to 6,763 tons, which we believe will prove to be of a much higher grade than reported on the Ore Reserve Sheets.

The 107,575 tons of ore are sufficient to keep the present reduction works in operation for about three years. It should be remembered that this tonnage does not include the low-grade ore which can be handled by the proposed new reduction works.

Due to the substantial ore-reserves, greater latitude in development is obtained and we are now able to prospect isolated territories, which to open up require much time and preliminary work. The stoping, also, not being right on top of the development as formerly, allows us to prosecute the latter with greater speed and less expense.

With substantial ore reserves ahead both for the present and new reduction works, with work well advanced to prospect extensive and very promising virgin territory, and with almost every facility at our command to do rapid, economical and efficient work, we believe the outlook for the future to be brighter and the mine on a safer basis than at any time in its history.

The prospects for a banner year loom up exceedingly bright, and barring unforeseen delays, this object ought to be accomplished.

In conclusion, permit us to extend thanks to the mine staff for their support and the good work accomplished, as well as to the heads of all other departments, without whose co-operation but little progress could be made.

Respectfully submitted,

A. R. GORDON,
Mine Superintendent.

EXPLORATION WORK.

SUMMARY

Drifting	8.719
Raising	2.070
Cross-Cutting	1.291
	12.080
Plus Connections	.574 5
	12.654.5
Aurora Prospects	.417
Total	13.071.5

ORE RESERVES.

Vein	Total tons of Ore in place	Total value	Per cent. Waste broken with Ore	Total tons of Ore and waste	Value per Ton at Mill (U. S. C.)
Candelaria	15,570	$ 349,277	16.5	18,140	$21 73
Colonia	3,065	212,283	57.8	4,839	43.87
North	730	28,478	49.4	1,025	27.76
Socorro	1,624	55,894	34.5	2,186	25 57
Nueva	3,424	173,335	46.5	5,018	34.54
Catalina	425	32,673	118.0	927	39.51
Capitana	5,040	213,142	34.1	6,763	31.51
San Miguel	54,205	1,538,158	20.0	65,046	23.66
Buena Ventura	500	12,500	20 0	600	25.00
Rosario	500	12,500	20.0	600	25.00
Northwest	310	110,199	25.0	387	26.35
Guadalupe	1,570	31,871	15.0	1,806	17.64
Culebra	148	6,127	85.0	238	25.75
	87,111	$2,776,437		107,575	

Value per ton delivered to Mill ..... $25.30 (U.S.C.)

Average per cent. Waste 23.7

New York, December 1, 1910.

To the President and Board of Directors:

The financial report of your Company for the fiscal year just ended presents to you some interesting figures.

During the past year, only seven dividends of one per cent. each have been paid, amounting to $105,000, and whilst this does not show as good as in past years, the expenditure incurred in extensive development of the mine, improvements, new machinery, etc., promises an increase in dividends in the near future.

The amount expended up to the close of the year on such improvements amounts to $115,000; but since then a large amount has been expended in paying for the new mill and its appurtenances, and withall we begin the new fiscal year with a cash surplus of $267,000.

You have been informed of the decrepit condition of your present mill. Nevertheless, the General Agent's report shows that 36,625 tons of ore were passed through the mill during the year, giving a production of 1,285,831 ozs. of silver, and 10,596 ozs. of gold, with a total valuation of $890,700. The aforesaid tonnage is the largest amount that has ever been worked in your mill in the history of the Company.

As advised on September 17, 1910, your Board of Directors considered it wise to change the payment of dividends from monthly to quarterly, beginning with the dividend to be paid on December 19, 1910. The object hereof is to facilitate business, and give your Board of Directors an opportunity of calculating in advance its resources and liabilities.

The activity shown in the progress of the construction of the new mill leads us to believe that the conclusion hereof is now reasonably within sight, and when this mill is finished, your Board anticipates a brilliant showing in its future product.

The amount due by the Honduras Government is now in the course of liquidation, and it is to be hoped that this asset will become a material one very shortly.

The audit of the accounts, kept in this office, made by the Security Audit Co. of New York, as well as a statement of the dividends, are hereto attached.

Respectfully submitted,

S. HEIDELSHEIMER,

Treasurer.

New York, December 20, 1910.

To the President and Board of Directors of New York and Honduras Rosario Mining Company, New York.

GENTLEMEN:

In compliance with your instructions we have audited the books of account of your corporation, kept at its office in this city, for the fiscal year from October 1, 1909, to September 30, 1910, and certify, subject to the correctness of the statements received from the mines as to the value of the inventories and other assets there, that the same are correct and in accordance with the Balance Sheet, Statements of Profit and Loss and Surplus, annexed hereto and forming part of this report.

Respectfully submitted,

THE SECURITY AUDIT CO. OF NEW YORK,

GEO. WEAVER,
Vice-President.

NEW YORK AND HONDURAS ROSARIO MINING COMPANY, NEW YORK.

Balance Sheet, September 30th, 1910.

ASSETS		
Cash in Bank and on hand in New York	$ 5,063.28	
Accounts Receivable	1,367.00	
General Agent's Account in Honduras	33,882.83	
New York City Bonds, 1911, at par	50,000.00	
Loan to the Government of Honduras	38,908.41	
Bullion	235 077.33	
Ores, Slimes, etc.	55,210.00	
Supplies	170,267.02	
	$ 589,775.87	
Mines, Real Estate, other than Buildings, Concessions, etc.	1,698,264.00	
Tramway and Gravity Road	22,870.00	
Buildings	37,116 00	
Machine Shop	22,738.00	
Mill Machinery	296,905.24	
Power Plants	258,207.00	
Transportation and Freighting Equipments	9,009 00	
Implements, Tools and Appurtenances at Mines	41,182 00	
Property at Agencies	16,640.00	
Live Stock	3,503.00	
Office Furniture in New York and at the mines	7,087.00	
LIABILITIES		
Acceptances, Notes and Accounts Payable		$ 74,147.23
Capital Stock		1,500,000.00
Surplus Account		1,429,149.88
	$3,003,297.11	$3,003,297.11

NEW YORK AND HONDURAS ROSARIO MINING COMPANY, NEW YORK.

Statement of Profit and Loss for the fiscal year from October 1st, 1909 to September 30th, 1910.

To Bullion and Ore on hand or in transit October 1st, 1909	$ 184,893.03	
By Bullion sold during the year		$ 777,618.98
" Bullion and Ore on hand or in transit September 30th, 1910		290,287.33
To Operating Expenses	500,472.49	
" Balance, Gross Profit	382,540.79	
	$1,067,906.31	$1,067,906.31
By Balance brought down		382,540.79
" Interest on Bonds		1,500.00
To Office Rent	2,200.08	
" Salaries	17,477.71	
" Directors' Meetings	3,664.00	
" Stationery	266.40	
" Postage	640.00	
" Cables and Telegrams	275.36	
" Taxes	1,188.28	
" Legal Expenses	250.00	
" Honduras Examination	6,338.70	
" Interest on Loans	497.05	
" Miscellaneous Expenses	1,767.46	
	$ 34,565.04	
" Balance, being Net Profit for the fiscal year ended September 30th, 1910	349,475.75	
	$384,040.79	$ 384,040.79

NEW YORK AND HONDURAS ROSARIO MINING COMPANY, NEW YORK.

Surplus Account, October 1st, 1910.

By Balance, October 1st, 1909		$1,184,674.13
To Dividends paid:		
October 29, 1909 ..... $15,000.00		
January 25, 1910 ..... 15,000.00		
April 22, 1910 ..... 15,000.00		
May 27, 1910 ..... 15,000.00		
July 22, 1910 ..... 15,000.00		
Sept. 16, 1910 ..... 30,000.00	$ 105,000.00	
By Net Profit for the fiscal year ended September 30th, 1910 (see the Profit and Loss Statement)		349,475.75
To Balance, September 30th, 1910	1,429,149.88	
	$1,534,149.88	$1,534,149.88
By Balance, October 1st, 1910		$1,429,149.88

TABLE SHOWING

Bullion Production.		Dividends.	
1882	$ 2,452.27		
1883	12,900.42		
1884	149,741.39		
1885	244,444.70		
1886	224,157.58		
1887	613,446.05	1887 No. 1	$ 37,500
1888	767,632.15	1888 Nos. 2 to 5	60,000
1889	590,189.55	1889 Nos. 6 to 14	150,000
1890	113.28		
1891	369,587.19	1891 Nos. 15 to 16	30,000
1892	614,498.67	1892 Nos. 17 to 21	165,000
1893	492,534.87	1893 Nos. 22 to 25	150,000
1894	392,485.92	1894 No. 26	37,500
1895	158,164.42		
1896	449,525.88	1896 Nos. 27 to 28	30,000
1897	568,872.06	1897 Nos. 29 to 40	180,000
1898	611,467.76	1898 Nos. 41 to 48	120,000
1899	798,994.77	1899 Nos. 49 to 60	180,000
1900	827,443.12	1900 Nos. 61 to 75	225,000
1901	780,760.18	1901 Nos. 76 to 93	300,000
1902	490,273.34	1902 Nos. 94 to 100	105,000
1903	436,818.29	1903 No. 101	15,000
1904	721,374.87	1904 Nos. 102 to 108	105,000
1905	993,065.39	1905 Nos. 109 to 121	180,000
1906	1,112,171.69	1906 Nos. 122 to 139	285,000
1907	791,347.62	1907 Nos. 140 to 153	210,000
1908	788,910.23	1908 Nos. 154 to 165	180,000
1909—10 months	636,500.00	1909 Nos. 166 to 173	120,000
1910	890,700.00	1910 Nos. 174 to 170	105,000
Total	$15,530,573.66	Total	$2,970,000

New York, December 1, 1910.

To the President and Board of Directors of New York & Honduras Rosario Mining Co.

GENTLEMEN:

In the preceding pages are detailed the records of the year's work.

Your inventory values in Honduras of the fixed assets, as of October 1, 1910, show a material increase over those of a year ago. This is represented mainly by new installations, construction of buildings, etc.

In the report of last year reference was made to the contemplated change of the works and camp from San Juancito to a site near the main entrance to the mine. This is now under way, and its completion is expected to be accomplished during 1911. With the exception of a few items, all the machinery and construction material are ordered, part already shipped, and the remainder in course of shipment. The new hydro electric plant is practically completely installed, and will be running by January 1, 1911. Before final orders were placed for the machinery, your Secretary visited the principal machinery manufacturers in Europe in quest of information and prices, with the result that, on comparison with American quotations, the advantage was in favor of the latter; therefore, all material was ordered in this country.

The change of site mentioned may be considered as the most important undertaking in the history of the Company, due to the possibilities created thereby. Not alone is economy of work in every branch expected by the erection of the new mill, but this will also permit the working of the large reserve of lower grades of ore at a profit, which, under existing conditions, is not possible.

The comfort of your employees is ever a matter of thought, and during the past year the policy of adding thereto has been maintained.

The new year, beginning the 31st of your existence, is replete with successful possibilities, the realization of which is looked forward to with confidence.

It is a matter of regret to record the death of H. G. B. Fisher, Esq., at North Adams, Mass., on December 1, 1910. He was one of the founders of the Company, and since its organization a Director, at one time its President, and, at the time of his death, Vice-President.

Respectfully submitted,

ERNEST SCHERNIKOW,
Secretary.

REPORT

OF

NEW YORK & HONDURAS ROSARIO MINING COMPANY

NEW YORK, DECEMBER 1st, 1911

OFFICERS 1911-1912

W. S. VALENTINE, *President.*
L. F. VALENTINE, *Vice-President.*
P. R. WEILER, *2nd Vice-President.*
ERNEST SCHERNIKOW, *Treasurer.*
M. F. SOTO, *Ass't Treasurer.*
J. M. DeHART, *Secretary.*

BOARD OF DIRECTORS 1911-1912.

H. H. BABCOCK,
LEWIS L. CLARKE,
I. HEIDELSHEIMER,
W. H. KENZEL,
ERNEST SCHERNIKOW,
M. F. SOTO,
L. F. VALENTINE,
W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1911-1912.

LEWIS L. CLARKE, *Chairman.*
W. H. KENZEL,
ERNEST SCHERNIKOW,
L. F. VALENTINE,
P. R. WEILER.

Report of the Board of Directors of New York & Honduras Rosario Mining Company

New York, December 1st, 1911.

To the Stockholders:

In coming before you with this, the 31st Annual Report, your Directors feel that they can present to you a more encouraging statement as to the progress and development of your business than ever before. It is true that, in actual cash returns, the stockholders have received less than in former years; but if our report made to you last year, wherein we called attention to the great expenditure for a new and much larger mill, is borne in mind, and when your Treasurer's report shows that some $600,000. of earnings have been expended in such material improvements, no debts having been incurred, it becomes apparent that our endeavors have not been in vain. When the annual report of our Manager, together with that of the Mine Superintendent, herein following, showing the great progress made, the amount of new ground developed, and above all the largest ore reserve, both in tonnage and value, in the history of your Company, is read, we certainly feel that our hopes for the future prosperity of your Company are well founded.

The Mine.

Special attention is called to this part of the Manager and Mine Superintendent's reports herein presented. There is much in them that is purely statistical, but the main, and possibly the most important feature, from the stockholders' point of view, is the physical condition, i. e., the ore reserves. These show:

1st: A total of ore blocked out, of 121,088 tons of a value of $26.16 per ton, as against 107,575 tons of a value of $25.30 per ton, during the previous year, a material increase, when it be considered that 35,813 tons were delivered at the mill and crushed, producing a total of $887,169.59.

2nd: A total of 340,000 tons of low grade ore of a value of $15.50 per ton, ready for the new mill when it begins operations.

Therefore, without figuring on the new developments, which are evermore being prosecuted, it can be seen that we have an ore supply on hand for many years to come.

The new electro-compressor plant, completed last year, furnishes ample compressed air not only for running a large number of air drills, but also for ventilation, thus putting us in position for greater development than ever before. Your Company still has large virgin territory to be developed, and no expense will be spared in opening it up by underground works. The cost sheets for the mine work compare favorably with former years, showing that no laxity has occurred in this branch of the business.

The Mill.

For some time past, fear has been expressed as to the mechanical possibility of this old and decrepit standby being able to keep up its steady grind. As formerly reported your representatives were ordered not to make any extensive repairs thereon, but merely to replace such parts as had worn out and become useless, in anticipation of the conclusion of the new mill. Thanks to the careful supervision on the part of your employees, both in the metallurgical and mechanical departments, absolute wonders have been accomplished, and the tonnage put through during the past year has equalled any since its original erection, and it may be said now that this mill will far outlast the time set for its well merited shut down.

The New Mill.

Calculations were made to complete this herculean task by the end of 1911. Unfortunately, an early rainy season retarded progress, and made the hauling of the heavy pieces almost an impossibility. Again, a certain period of political unrest caused a scarcity of native labor; but all in all, comparatively we have fallen little short of the mark, as we are now assured that early in March, 1912, the work will be completed. Your Company will then have the honor of dropping 1800 lb. stamps, the heaviest batteries of any mine on the American Continent.

Words can hardly express the enormity of the work done. The Treasurer's report gives the figures of cost, and the Secretary's report gives statistics showing the weight of the machinery and

supplies moved; but the wonder of it all is the enormous solid pieces handled over the rough mountain trails from the coast to the mine, and all without any mishaps worth mentioning. Never in any tropical country has such a daring thing been undertaken.

The construction of this new mill must in itself be considered a great task; but when it be remembered that, in combination therewith, this entailed the erection of new mechanical and electrical shops, assay offices, refinery, agents and engineers' offices, club house, hotel and family houses, doctor's office and hospital, besides many minor buildings, in fact, the establishing of an entirely new town, favorable judgment must be passed on the work done.

When everything is completed, you will have a most modern mining camp, one that will well compare with any now existing. You will then have a plant that will treat 200 tons per day at a pro rata cost lower than ever before. The health and comfort of your employees have been fully considered in the location and construction of the various residential quarters. A new native village, in close proximity to the mine, has been laid out by your engineering corps, and your better native employees are gradually occupying same.

The report of the Constructing Engineer is hereto attached.

Topographical Survey.

A topographical survey of your property has long been recognized as a vital necessity for the proper knowledge and scientific development of same. Some two years ago, a topographical corps, under Joseph H. Sinclair, Esq., C. E., was established, and recently this work has been completed. We now have a most complete map covering the entire topography, a reconnaissance geological survey, timber fields and water supply, all detailed in clear form to make history for the entire future of your property.

Financial.

The Treasurer's report following, presents your financial status at the close of the fiscal year. Considering the heavy outlays above referred to, it shows a good condition. The high credit standing has in no way been altered.

Political.

A political evolution took place during the past summer, resulting in the recent election to the Presidency of Honduras, of Ex-President General Manuel Bonilla, who takes office on February 1, 1912. Every indication points to a continued era of peace and prosperity in the country. Our relations with the Government have been of the most cordial nature, and we have been favored with every assistance and co-operation of all the officers, both federal and local.

Reports.

All the reports hereto attached are interesting and contain fullest information. We have attempted to reduce same, but find it difficult. Therefore, we have no apologies to make for the volume thereof.

Employees.

The great amount of new work at your property called for a considerable increase of staff and employees. In general, in all departments men of highest standing have been engaged. The result shows that they all have taken individual pride and interest in the work before them.

We congratulate the Company on the high degree of organization existing, and look forward to the longer tenure of contracts of these valuable men in our works.

The Secretary of the Company, Mr. J. M. DeHart, is now at the Mine, taking up all important questions with the Manager.

In closing this report, your President, in the name of the entire Board of Directors, desires to express great regret at the loss by death during the past year, of its faithful co-operators of many years standing, E. J. Swords, Esq., and S. Heidelsheimer, Esq., and the resignation of F. H. Parker, Esq.

For the Board of Directors,

W. S. VALENTINE,
President.

San Juancito, Honduras, October 1, 1911.

To the President,
New York, N. Y.

Annual Report.

Dear Sir:

We submit herewith a resumé covering the mining and milling operations, as well as work performed on new construction during the fiscal year ending September 30, 1911.

Mine.

The exploration work performed during the year, 13,353 feet, distributed as per following table, among the different working veins, does not show any substantial increase over the previous year. Analysis of this work shows that the largest amounts of work performed in individual veins were in the San Miguel, Candelaria and Capitana. The Crucero crosscut has been driven steadily, for a total of 1,369.0 feet, a monthly average advance of 114.1 feet. The results obtained from this exploration work we leave for the more detailed explanation of our Mine Superintendent, which accompanies this report.

The total cost and cost per foot, of development work will be seen from the following table, as well as a comparison of these costs for the previous year.

Year.	No. Ft.	Total Cost.	Cost per Foot.
1909—1910	12,918	Pesos 202,303.96	Pesos 15.66
1910—1911	13,353	Pesos 208,413.10	Pesos 15.60

The development work for the past year has, in a very large part, been confined to the northwest section of the mine. This entire country is composed of rock of a hard, tight nature, not easily broken and very difficult and expensive to work. It speaks well for the new and modern equipment in the line of air drills and electric haulage, as well as for the policy of employing American miners, in that, despite the fact that the faces are further away from the mine portals, with consequent higher tramming costs, together with the unusually hard ground encountered, the yearly results show neither decrease in footage nor increase in cost per foot.

The discovery and development of the Concepción vein is perhaps the most noteworthy underground event of the year. This vein is more fully described in the report of our Mine Superintendent and, further than to congratulate the stockholders of the Company upon this addition to their ore reserves, we shall not comment on it here.

Ore Reserves.

Below is given a summary of the ore reserves which is the result of careful computation by the mine staff. Especial attention is invited to the condition of the Candelaria vein, when viewed with regard to the tonnage supplied during the year. The same attention to the reserves in the San Miguel vein show that despite the large production of this vein during the year, the total tonnage in reserve has been reduced comparatively little. The Concepción reserve is one which did not appear in the last Annual Report, and you will note its effect on the total tonnage and ton value.

The total ore reserves for the mine (121,088 tons of estimated gross value $3,168,739.00) has been increased some 13,500 tons, of ore and waste, with an increase in gross estimated value of $392,302, over the estimated reserves on the same date of last year. This increase, added to the dry tonnage delivered to the mill, shows a total tonnage developed during the year, of 49,326 tons of an estimated gross value of $1,404,371.00, or per ton value of $28.46.

General Summary of Ore Reserves—1911.

Total tons of ore	97,365
Total tons of ore and waste	121,088
Total value	$3,168,739.00
Value per ton at Mill	26.16
Average per cent. waste	24.3

The correspondingly better condition of the mine, over the same date of the previous year is here clearly shown and consequently must be taken into consideration when contemplating the future life of your property.

The production of ore during the year, amounted to 39,127.9 tons.

The mining costs for the fiscal year, summarized, are as follows:

	Total.		Per Ton Ore. Total.	
	1910-11.	1909-10.	1910-11.	1909-10.
Labor	515,793.74	525,948.78	14.40	14.35
Supplies	215,725.72	177,672.38	6.02	4.85
Total Pesos.....	731,519.46	703,621.16	20.42	19.20

Stoping, tramming and timbering accounts, covering the same period, are summarized as follows:

	1910-11.	1909-10.
Stoping	5.63	5.89
Tramming and Car	1.26	1.10
Timbering	1.68	1.90
Totals, Pesos	8.57	8.89

The increase of pesos 1.22 per ton in the mining costs may be properly ascribed partly to the fact that during the year rails, cars and drilling equipment were charged into the working account, thus increasing appreciably the total supply's charge, and also to the fact that, as may be seen by reference to the report of the Mine Superintendent, we have broken ore in the stopes, ready for tramming to surface, exceeding 7,000 tons in amount. Had this ore been considered in the calculations affecting the ton mining costs for the year, the figure so obtained would not have indicated any increase. Furthermore, it is worthy of note, that at a comparatively slight extra expense, this ore could have been delivered to the head of the tramway line, in which case the entire ton mining costs would be lower approximately by two pesos per ton. This is an interesting fact, more or less indicatory of what may be expected when the delivered mine tonnage is doubled to provide for the requirements of the new reduction works, and the economies obtained by carrying out the increased tonnage on a so much larger scale are put into effect.

Included in the ton mining costs above mentioned are the costs for the extensions to the Peña Blanca Electric haulage system, which has been extended to the San Miguel Portal on the Crucero side of the mountain and which include rails, cars and locomotives; the costs connected with re-piping the level with a new

air line, are included as well as the installation and maintenance of both the haulage and air systems. This cost being 104,963.42 pesos.

Reduction Works.

During the year the mill crushed 35,813.29 dry tons, producing 1,395,136.95 ozs. silver, and 8,103 ozs gold, as against 1,289,-173.87 ozs. silver, and 10,621 ozs. gold for the previous fiscal year. Valuing silver and gold at $.50, and $20.00, U. S. Currency, respectively, the product, consisting of 1,291 boxes of precipitates, weighing 134,618.49 dry pounds, and two bars of bullion weighing 1,116 ozs. troy, shipped to New York, amounted to $859,642.95, U. S. Currency, as against $857,008.59 for 1909-1910.

The following gives the tonnages, values and extraction obtained by the mill for the year, as well as stamp duty:

	Dry Tons Milled	Heads U. S. C.	Tails U. S. C.	Percent. Theoret. Extract	Actual Recovery U. S. C.	Percent. Actual Extract.	Average Stamps Dropping Daily	Stamp Duty Daily
Aver. and Total..	35,813.29	$28.25	$2.93	89.62	$859,642.95	84.93	47.20	2.08

A daily average of 47.20 stamps dropping, is gratifying when the facts are considered regarding the frequent unavoidable shutdowns, due to the many repairs to the mill itself, as well as to the flume lines which supply the water power to operate it.

The costs of labor and supplies are as follows:

	Total		Per Ton.	
	1910-11.	1909-10.	1910-11.	1909-10.
Labor	81,399.73	75,015.35	2.27	2.05
Supplies	246,742.54	258,346.03	6.89	7.05
Total, Pesos	328,142.27	333,361.38	9.16	9.10

While the labor cost, both in total and per ton, is higher than for the previous year, the saving in supplies and chemicals used very nearly overcomes the increase in the former. The increase is due in part to the fact that the working force has been increased, thereby attaining better efficiency, and in part to the necessity of the constantly increasing quantity of repair work which the old mill necessitated, and of which by far the greater charge goes to the labor account.

Cleaning Plant and Tramway.

During the year there were transported to the mill by means of the aerial tramway, 38,716.32 wet tons, at a total cost of pesos 39,216.22, giving a cost of pesos 1.09 per ton as against a total cost for the year 1909-10 of pesos 55,027.86, or a cost per ton of pesos 1.50.

The usual repairs and replacements were necessary, including five new towers and two new wire cables. The tramway is at present giving excellent service and working to its best capacity.

Surface Department.

This department fulfilled its usual duties in the upkeep and repair work performed in all parts of the property not included in the regular producing departments. The total cost for the maintenance of this department shows an increased expense of pesos 35,518.39, or pesos 1.12 per ton of ore produced. This increased expense was due largely to repairs to existing roads, notably the road to the saw-mill at Potrero Ramos, and to the main road to Tegucigalpa. With the heavy amount of freight which had to be hauled over the latter road, it was unavoidably necessary to keep a gang of men repairing, widening and leveling the road, and to a lesser extent the same is true of the Potrero Ramos saw-mill road. This expense amounted in total to pesos 26,260.09. There is also included in the total, the expense of maintenance of the saw-mill, besides the installation of some improved sawing machinery, which is referred to under the head of Potrero Ramos Saw Mill, and to furnishings for office and houses required by the largely increased force of foreign employees.

New Construction Work.

San Juancito Power Plant.

This plant was completed during the year, and officially inaugurated on January 14, 1911. The entire cost of this plant as shown by the cost sheets has been pesos 220,475.54, of which pesos 143,895.46 was expended during the year. This figure includes the cost for building and putting into operation an additional water

supply known as the "Aguacatal Flume Line," costing in itself pesos 19,895.73.

This entire plant, since its inauguration, has given eminently satisfactory service, from a standpoint of repairs necessitated, as well as from the reliability with which power has been supplied in emergencies. Your Company is to be congratulated on having a generating plant of such quality.

New Rosario Works.

Excavation work on the mill proper was started during the last week in February, although previous to that time considerable preliminary work had been done in the way of roads, grading, quarters, etc. The work of mill construction was actively taken up in the early part of the month of April, upon the arrival of Mr. B. D. Davis, E. E., who had been engaged as Superintendent of Construction. Since that time, advantage has been taken of every opportunity to push the work at top speed. Agents in all parts of the country have been employed to obtain and send to the property all classes of labor. The question of moving the tremendous quantities of freight was a serious one, but was handled in such a way that it may now be said that almost this entire question is a closed incident.

We append herewith a summary of the work finished to the date of October 1st, as well as a report on the different phases of the work by our Superintendent of Construction. Our Weekly Progress Sheets, with numerous photographs, which have been forwarded regularly, show in great and exact detail the progress of the work, and these, combined with the report above mentioned, make unnecessary any further remarks appertaining to the construction work.

The entire costs for this work, during the year, summarized, give:

Labor, Pesos	289,217.48
Supplies, Pesos	54,372.60
Total, Pesos	343,590.08

The above total does not include machinery and special installation material ordered solely for this work. These are, as customary, being held as "goods in transit" until the completion

of the mill. The freighting, inclusive of handling charges at Amapala, have been included in this cost, amounting alone to pesos 110,028.74. The supplies above charged include only supplies used from our General Warehouse and cement. Of the latter article there have been used to date 3,471 kegs of Portland cement, out of the 12,491 kegs which have been shipped for this purpose.

Regarding the time of completion of the mill we draw attention to the estimate of date of completion, made during July last. There have been no developments which have proven themselves of such a nature as to make necessary any change in our estimate as to the date upon which we hope to set the new reduction works in operation, and, as may be seen from the report of our Construction Superintendent, we have every hope that by March 1st. we may see the end of the most important part of the new construction work and begin our preliminary test runs.

General.

The Mine saw-mill has been moved to its new site near the Crucero Portal and is now in operation, delivering sawed lumber and logs to the Portal at a cost of pesos 35 per 1,000 feet as against pesos 65 per 1,000 feet from the old site. Pesos 2,526.43 have been expended for general repairs and renewals.

The new saw-mill installation at Potrero Ramos has given great satisfaction since it was put into operation. Some additions in the way of a planer and its necessary adjuncts have been made as well as some amplifications of logging roads to facilitate the hauling of rough logs to the saw-mill.

The contractor has delivered 489,720 board feet of lumber, the greater part to the New Rosario Works, over the wagon road completed during the previous year. The costly equipment of specially constructed wagons and draft mules may be considered as entirely warranted when the splendid time made in the delivery of lumber is viewed from the standpoint of the necessities of our new construction work.

The topographical map, which was started during the previous year by J. H. Sinclair, C. E., has been completed and has been delivered to your office. It is unnecessary to comment on the

beauty and worth of this map, except that it has been executed on lines used by the United States Geological Survey, and will be of inestimable value to your mine officials, in the better understanding and accurate knowledge which it will give of the surface topography of your various properties.

The foregoing constitutes the results of the work accomplished on your property during the year under consideration. The management at San Juancito takes great pleasure in commending the members of its staff for their earnest endeavors and hearty support rendered during the year and improves this opportunity to draw official attention to the fact.

We desire as well to express our great appreciation of the manner in which our efforts have been received and furthered by the material help given us by the Directors and Officers of your Company. We trust that the results as above set forth will merit their approval and will bespeak the same generous support and help for the coming year. The prospects for a prosperous year may be viewed in the light of a somewhat higher and more valuable ore reserve, a new and modern reduction works nearing completion and every indication for undisturbed opportunity for work.

Respectfully submitted,

H. B. BARLING,
Manager.

San Juancito, Honduras, October 1st, 1911.

To the Manager, San Juancito:

Dear Sir:

We take pleasure in submitting the following report, which is a brief resumé of work done in the mines and concessions of this Company during the year ending October 1st, 1911:

Ore Reserves.

The ore reserves, as figured on October 1st, 1911, show 97,365 tons of ore in place and 121,088 tons of ore, including 24.3 per cent. waste, which, on account of the narrowness of the veins, necessarily must be mined with it.

In calculating the reserves 13 cu. ft. of vein matter in place was taken to constitute one ton. The value, per ton, as delivered to the San Juancito mill, is $26.16 (U. S. Currency), an increase of $.86 over last year's figures.

In addition to the above reserves there is a broken ore reserve of at least 7,000 tons, valued at $23.00 (U. S. Currency) per ton, on which all mining expenses (except tramming) have been paid.

Ore Extracted.

The quantity of ore delivered to the mill was as follows:

Total cars of wet ore	62,020	
Average car capacity	0.63	tons
Wet tons delivered to mill	39,127	tons
Actual weight at mill, less moisture	36,203	tons
Difference due to .074% moisture	2,924	tons

Development.

	Feet.
Drifting	7,810.5
Raising	2,573.5
Cross-cutting	2,666.0
Total	13,050.0

During the past year development was done in eleven veins and five crosscuts, and the following is a brief discussion of the work done in each:

Candelaria Vein.

Development	2,166.0 feet
Production	9,987.0 tons
Present ore reserve	23,098.0 tons
Average value at mill	$21.13

There has been a marked decrease in the amount of development and quantity and quality of ore produced during the past year, and this has been due to the fact that the limits of the vein were reached more than two years ago. Development during the past year was entirely confined to the lower levels and consisted in opening up ore pockets existing on the outskirts of the three ore bodies, so productive in the past.

A new sub-level, the L. 100, B. 37, was cut and the subsequent development in the main vein and Stringer No. 3 has been of a highly profitable nature. The L. 200 heading has been extended into the producing territory at the L. 100 level, B. 37, and the L. 300 Guadalupe heading is now well into the Candelaria vein, with the objective of penetrating the regions below some stopes in ore bodies worked above but not below the L. 200 level.

At the U. 100 level, B. 39, the heading has penetrated the Rosario vein, and the Heading West, the Guadalupe vein. A small quantity of very high grade ore was opened up in the vicinity of the Guadalupe junction, but as the heading has already entered the stoped out territory of the Guadalupe, all possibilities for more ore from this section are eliminated. The ore found by the heading East, while not rich, was of good width, and several thousand tons were obtained. This heading will be extended further to the East to enter a low grade ore body existing at the U. 150 level.

As was planned last year, some of the stopes producing ore too low in grade for the San Juancito mill, have been worked, and this ore stored in our old open stopes. The quantity of ore thus stored amounts to about 3,000 tons, and that from rich pockets occasionally encountered as the stopes advanced, about 1,300 tons of which were sent to the mill.

The Candelaria will again take on a new lease of life when the new mill starts, as there are many thousands of tons of ore at each Candelaria level which can be treated at a good margin of profit.

Capitana Vein.

Development	1,626.0 feet
Production	3,152.0 tons
Present ore reserve	11,424.0 tons
Average value at mill	$36.53

This vein is the source of the richest ore, the proportion of gold to silver being over 200 per cent. higher than in any of the other veins which are being worked at present, except a portion of the Candelaria. Unfortunately, the vein is narrow, averaging less than one foot, and the ore frozen to hard andesite walls, all of which adds to the difficulty in mining it clean, and at the same time producing a large tonnage.

Development above the Peña Blanca level is practically completed, the work done above the U. 550 level showing that the vein, although rich in places, is too narrow to be stoped at a profit.

It would be advisable to extend the Capitana headings, both at the Peña Blanca and the U. 350 levels, still further to the southeast and towards the Candelaria, as there is enough room for the existence of an important ore body in the intervening distance.

Concepción Vein.

Development	1,363.5 feet
Production	934.0 tons
Present ore reserve	17,299.0 tons
Average value at mill	$29.29

This vein was cut by the Crucero crosscut and is the most important find of the year. The character of the ore, its width and occurrence, are about the same as that of the San Miguel. Both veins have the same dip and strike and merge into each other, and it is, therefore, hard to say where the one begins and the other ends, as the junction between the surface San Miguel and the Concepción is not everywhere well defined. The Concepción ore is very variable in width and value, and portions of the vein contain much country rock mixed with it.

Although the lateral limits have already been found, no development has been done below the Peña Blanca or above the U. 350 level. Some of the raises run from the Peña Blanca level are over 200 feet in height and show that the vein becomes narrower

and poorer after a height of about 175 feet is reached. This, however, may only be a poor section. A crosscut is being driven at the U. 350 level and when connection is made with the Peña Blanca raises, the most promising will be continued.

Due to the variable character of the vein it is rather difficult to determine just what the possibilities are for obtaining more ore. We do not expect much high grade ore below the Peña Blanca, but believe that another important ore-body exists above the U. 350.

San Miguel Vein.

Development	2,983.5 feet
Production	19,765.0 tons
Present ore reserve	52,158.0 tons
Broken ore reserve in stopes	4,000.0 tons (about)
Average value at mill	$23.82

The San Miguel has been the largest producer during the past year, being the source of about half of the total milling ore.

The vein was again cut at the L. 300 level, but subsequent development showed it to be badly faulted and practically valueless. Work at the U. 550 level and in Raise B. 56 met with better success, however. A small rich pocket was found in the Raise which will prove to be a low grade ore-body at the 550 level.

The North headings at the U. 550 and U. 350 levels are but a short distance from the surface workings. As soon as the connections are made the old stopes will be retimbered and preparations made to stope the low grade ore which they contain. The ground at the U. 350 level, south of the present stopes, does not appear to be as badly faulted as that at the Peña Blanca level. This U. 350 heading should, therefore, be continued in a southerly direction, because so long as the ground continues in its present state, we think the possibilities for ore are good.

Rosario Vein.

Development	1,027.0 feet
Production	3,510.0 tons
Present ore reserve	5,160.0 tons
Average value per ton at mill	$18.08

Drifting to the East at the L. 400 level has been continuous and the heading is now in Block 22. Ore of good width and fair

value was found in Block 26, but upon raising it was discovered that it was nothing more than a pillar caused by the L. 400 drift and the bottom of an old stope worked from the L. 300 level. Raise No. 26, which in former times was used as a general ore chute between the L. 200 and L. 650 levels, has been cleaned, retimbered and careful examination made of the vein. This shows that the ore of the above described pillar extends below the L. 400 level for at least 50 feet, but as Raise No. 26 is at the extreme West edge of it, it is probable that the downward extent is greater than this. Some very good ore has been found in L. 400, Stringer West, B. 26, and it is now being stoped.

An appreciable amount of work has been done towards recovering some of the old workings, nearly all of it being confined to the Peña Blanca level. The heading at this level has been reached and is about 350 feet east of the adit crosscut. A raise in Block 44 also has been recovered and access gained to the U. 200 and U. 250 Rosario levels. About 300 feet of drifts have been reopened at the U. 200, and about 400 feet at the U. 250. Efforts are now being made to reach the levels above the U. 250. So far as we are able to judge the ground above the U. 200 has been pretty well stoped, but that between it and the Peña Blanca (a distance of 85 feet) does not appear to have been touched. The Peña Blanca drift is of the usual size, all of it being driven in vein. Upon close examination it was found that the vein is much wider than this drift and work was at once started to expose the entire vein.

About 150 feet of the drift has already been widened and this work shows that the vein has a width of nearly 18 feet in places, while its average width is well over 6 feet. No definite figures regarding the value and quantity of ore are as yet available, but from the data at hand up to date, we look for a large tonnage of low-grade ore from this section of the mine.

Nueva Vein.

Development	464.0 feet
Production	255.0 tons
Present ore reserves	3,538.0 tons
Average per ton at mill.....	$33.09

About 200 feet of drifting was done in an easterly direction

at the Zero level, but no ore was found. At the Lower 450 level two raises were driven through to the L. 300, to develop the ore exposed in Block 49. More work will be necessary to open up the ore found at the Zero, L. 200 and L. 300 levels, but outside of this all other sources for new ore below the Zero level have been exhausted. Some time during the coming year work should be started to locate and develop the vein at and above the Peña Blanca level.

Colonia Vein.

Development	None
Production	3661.0 tons
Present ore reserves	3971.0 "
Value per ton at mill	$44.47

Nearly all sources for development above the L. 300 level have been exhausted. Some good ore exists in the floor of the L. 300, but the quantity is not great.

At the time the Colonia Mine was purchased the existing ore reserves amounted to 5,300 tons. Since then the vein has produced over 13,000 tons and will again become an important source of ore for the new mill.

Buena Ventura and Northwest Veins.

Production	279 tons

All recent and some of the recovered old workings are being kept open for, while these veins contain but little ore of the present milling grade, they will become sources of low grade ore for the new reduction works.

Guadalupe Vein.

Development	457.0 feet
Production	236.0 tons
Present ore reserves	1,588.0 tons
Average value at mill	$17.64

Most of the above development was done at the L. 300 level, one raise being driven in B. 45 to the L. 200 level and the Lower 300 heading extended into the Candelaria vein. All the ore extracted during the year came from the stopes at the L. 450 level.

Socorro Vein.

Production	160 tons
Present ore reserves	2,143 tons
Value per ton at mill	$25.47

North Vein.

Present ore reserves	730 tons
Value per ton at mill	$27.78

No development work was done and but little ore was taken from the above veins. Therefore, the conditions in each are about the same as at this time last year. Of the two, the Socorro gives promise of being the greater producer in the future.

Catalina Vein.

Development	56.5 feet
Present ore reserves	927.0 tons
Value per ton at mill	$39.51

This vein was again cut at the Zero level more than a year ago, but the succeeding development has not located much ore. The body stoped at the Peña Blanca, U. 250 and U. 350 levels lies still some distance south of the present Zero heading and efforts will be made to extend it into this territory during the coming year. We are of the opinion that an important body of good grade ore will be found.

Some very high-grade ore still exists in the U. 250 and U. 350 level stopes, and now that the retimbering of the West vein drift is completed, which permits easy access to the Catalina workings, this ore can be stoped during the coming year.

Crucero Crosscut.

Total length, October 1st., 1911	1354 feet

The San Miguel and Capitana veins furnishing sufficient evidence that the northwestern section of the mine was a highly mineralized one, it was deemed advisable to drive a crosscut to further prospect it and determine, at greater depth, the condition of several well-known veins, of which the Concepción and San Vicente are the most important. As a well defined fault stringer

exists in the section of the mine from which the crosscut was to be started it was decided to drive in it so long as it kept the general direction of the intended crosscut; the stringer and the northwestern section could thus be prospected at the same time.

The first vein cut was the Concepción and the results of its subsequent development are given in detail under the Concepción heading.

When the vicinity of the San Vicente surface workings was reached a crosscut was driven into the underlying territory, but contrary to expectations no vein of any importance was found. The ground is badly faulted and the seams filled with talc, some of which carries values. This crosscut is only about 200 feet below the lowest surface San Vicente level, so a raise should be driven which ought to furnish some information as to what has become of the vein at this particular point. The Crucero crosscut next entered ground, also badly faulted, which contains several stringers, some of which carry good values. Work is now being done in the most promising one, but the ground is loose and there is a large flow of water; therefore but slow progress is being made. Some very fine specimens of silver sulphide have been obtained from this stringer, but we look for no stoping ore until more solid ground is reached.

About 100 feet ahead of where the above stringers were cut the crosscut entered a stratified formation of shale and slate, having a general westerly strike and 60 degree dip to the north. This formation is overlaid by one of igneous origin, in which occur several small veins, but when the crosscut reached their vicinity it failed to cut them, showing that they do not extend into the stratified zone. At frequent intervals dykes of igneous origin, anywhere from 10 to 50 feet thick, were cut, and these are undoubtedly the source of the igneous surface rock.

What development has been done in the stratified formation of the San Juancito region shows that it is not ore bearing, and most of the small veins which are productive in the overlying igneous rock, do not extend into it. The appearance of this rock in the crosscut is, therefore, not looked upon as a good sign, but it has been our contention right along that the crosscut heading would soon run out of it, and this now appears to be verified, as the heading has been in igneous rock for nearly two months,

which gets harder and more uniform as the heading advances. In the Quebrada Honda section, for which the crosscut is heading, there occur several veins, in some of which work has been done. It will be at least another year, however, before the territory in which they occur will be reached.

The plan is to continue driving the crosscut for at least another 2,000 feet, as this is the cheapest and most practical way in which the Northwestern section of the mine can be prospected, and also to drive a raise through the shales in the vicinity of the veins, which do not appear to extend through it, and determine if they produce at depth in the igneous formation.

The average width of the crosscut is about 7 feet, and average height about 7.5 feet. One thousand and forty-nine feet were driven with two machines, and the time required to make this distance was seven months, at an average rate of 150.5 feet per month. The average cost per foot for 1,049 feet was Pesos 21.93, which includes all material, timbering and labor. The average cost for tramming for the above distance was Pesos 2.90 per foot; therefore the total cost (outside of power, track, pipe, superintendences, etc.) was Pesos 24.83 per foot.

West Vein.

A raise was run from the Zero to the Peña Blanca level which will act as a pipe, timber and ladder way for the Catalina workings. It is located in B. 61.

At the Peña Blanca level 525 feet of caved drift have been recovered and retimbered, and the original heading has at last been reached. Driving in the vein has already commenced, and when the work is well started a monthly advance of at least 175 feet is anticipated. The plans for developing this vein, formulated more than two years ago (see semi-annual report, April, 1909), will now be carried out, and the most important work will, of course, be the driving of the Peña Blanca heading. Raises will be run at frequent intervals to prospect the ground above the Peña Blanca level, and it is also probable that levels at a higher elevation will also be necessary. The first series of raises are to be driven to connect with the old upper workings for the purpose of ventilation, and it is very likely that they will also open up an important quantity of ore.

Future Development.

The limits of the developed vein system, which, for over thirty years, has supplied all the milling ore, have been reached and, consequently, all sources for large quantities of ore have been exhausted. The ground has been so thoroughly gone over in the course of years that what new high-grade ore is found in the future can only be estimated in hundreds, insteads of thousands, of tons.

To provide against the time when the large low-grade ore reserves existing in this vein system shall have become depleted, development must be confined to entirely new territory. As this vein system embraces the eastern, northern, northeastern and southeastern sections of the mine, the remaining unexplored sections of the mine lie to the south, southwest, west and northwest. The northwestern section, which is about 4,500 feet in extent, has already produced the San Miguel, Capitana and Concepción veins, and is being further prospected by means of the Crucero crosscut. The western section is about 5,000 feet in extent and is to be opened up by the West vein heading, from which also should be run crosscuts into the southwestern territory. The largest unexplored ground is that to the south, and it is about 18,000 feet in extent. The Aurora Mine and Aurora Concession both lie south of the Rosario Mine, and therefore the South development would be headed for their district.

Driving at the rate of about 2,000 feet per year in the Crocero Crosscut and West vein heading their respective territory would be well developed long before the estimated low-grade reserves are exhausted. The only important development remaining would be to the South and that would also be sufficiently advanced to be close to the mineralized territory of the Aurora Mine and Aurora Concession.

From what has just been said it must not be supposed that the mentioned sections of the mine will be actually developed at the speed, and, therefore, in the time mentioned. It is more than likely that veins and stringers will be struck which, in turn, will require development, and this, of course, would retard more or less advancement of the main headings. We have, however, supposed the worst conditions to illustrate what can and should be done during the time the mine has sufficient reserves to remain

on a paying basis.

In a mine of this size there is almost no restriction as to the amount of monthly footage which could be made, but when it is remembered that its only object is to locate and expose ore bodies, a limit is at once reached which depends entirely upon what territory is available for development purposes. The quantity of ore in any section of new ground is fixed by Nature; consequently all that remains to be done is to locate, expose and prepare it for stoping with as few feet of development as possible.

In short, our object is to obtain a *maximum* amount of ore per foot driven and that this has been uppermost in our minds will be seen from the quantity and value of the ore reserves.

Low Grade Ore Reserves.

Vein.	Tons.
Buena Ventura	20,000
Candelaria	65,000
Capitana	10,000
Concepcion	45,000
Colonia	10,000
Catalina	5,000
Guadalupe	15,000
Nueva	5,000
North	3,000
Socorro	7,000
San Miguel	55,000
Rosario	75,000
West	10,000
Northwest	10,000
Stringers	10,000
Total	345,000

Average value at mill—$15.50 per ton.

The above figures include the present high grade reserves and are merely an estimate, therefore necessarily conservative.

Compressors and Electric Haulage.

The compressors operated at their usual good efficiency throughout the entire year and are rendering very satisfactory service.

Although the locomotives were put into service about a year ago no appreciable benefit was derived from them until about last April, when connection was made with the San Miguel tracks.

Since that time they have handled about 150 tons of ore and waste daily. Outside of the Catalina drift, which is now being widened, all other work of this nature has been completed and 24-inch track and trolley wire installed. The total amount of track now in use is 12,245 feet, and this is being constantly increased as the various development headings advance. The new rotary dump cars have proved satisfactory in every way.

No appreciable decrease in cost can as yet be expected between electric haulage and the old method, and this is due, firstly, to the greater cost of installation per foot of track; secondly, the system operating below capacity; thirdly, the system has not been in operation a sufficient time for comparison to be made.

When development work in the West and Catalina veins is well under way and ore for the new mill stoped, the locomotives will very likely be called upon to handle from two to three times the material they now do, and then an appreciable saving is bound to occur. It must also be remembered that development of the Western and Southern sections of the mine would be next to impossible in conjunction with what ore it is necessary to move, were it not for the electric haulage.

Rosario Electric Haulage.

The tunnel is being slightly widened and the sharp curves cut down to a longer radius. Laying the 24-inch track will begin as soon as most of the widening has been completed.

Aurora Concession.

To thoroughly prospect the mineral-bearing section of this concession will take no small amount of money. It will be necessary to cut trails, build a blacksmith shop, as well as two or three small houses for the employees. If work is to be well directed and good headway made, some responsible person should be put in charge and make his headquarters on the concession.

It was thought that in view of the additional expenditure resulting from the new mill construction it would be best to leave this work for the near future and instead open up territory relatively far more important at present, which could be penetrated from the San Juancito side, and its ores sent to reduction works

ready to receive them, rather than spend money in finding ore in a locality where a power plant and reduction works would first have to be erected before any profit could be derived therefrom.

Cable Tramway and Mine Sawmill.

The tramway operated throughout the year at its usual efficiency and up to full capacity. Only such repairs were made as were absolutely necessary to keep it in running order.

The Mine sawmill was moved from the Peña Blanca to the Crucero side of the mine in the early part of the year.

A reduction of about 20 per cent. has also been made in the price of round mining timber.

The mine at present has at least five months' supply of round timber in stock and about 50,000 feet of sawed lumber of various dimensions. The Crucero section, while not as extensive as the Peña Blanca, should at the present rate of consumption supply timber and lumber for several years to come.

General Remarks.

In spite of the large ore reserves and good values, there was much difficulty in keeping the monthly production at some regular figure during the past year. This has been entirely due to the fact that the ore came from four or five large stopes, while in former years never from less than fifteen, and sometimes as many as thirty-two. It will readily be seen that if few stopes are worked and one of them gets poor, a decided drop in the grade would result, while, on the other hand, if, say, twenty stopes were worked, two or three could get poor, and the tonnage to be made up, not being large, could be obtained from the remaining good stopes. The average monthly production, however, is higher than for many years past, which shows that although conditions arise which make it more difficult to keep a uniform monthly production from month to month, they readjust themselves, so that what is lost one month is usually gained the next, and, therefore, the result at the end of the year is the same.

Although the average of last year's high-grade reserves was $25.30 (U. S. currency) per ton, the ore treated during the year averaged about 7 per cent. higher. The present high-grade re-

serves show both a greater tonnage and higher value per ton than those of last year and this is mainly due to the 17,299 tons of $29.29 (U. S. currency) ore blocked out in the Concepción vein. The gross value of the present reserves, we believe, is greater than ever before.

We would point out the fact that the mine now has a broken ore reserve of about 7,000 tons on which all mining expenses have been paid. With a broken ore reserve to draw upon, the periods of shortage of labor, strikes, shortage of power, etc., can be tided over without an appreciable effect upon the production.

With the new mill in operation ore which for years has been developed will be mined. The estimated low grade reserves indicate that the mill will be kept busy for some years to come, even if no further work were done to locate new ore bodies. We look for an appreciable reduction in mining costs when the new mill starts, as many fixed expenses, which now are distributed over 100 tons per day, will then be distributed over twice that amount.

In conclusion, we would say that, in our opinion, the outlook for the future of the mine appears to be bright. For a number of years such ore as has been milled has always been replaced by new finds. During the last year much more ore has been found than was treated, although the increase in development has not been great, and we think that this is everything that can be expected from any mine.

During the past two and one-half years the Capitana, San Miguel and Concepción veins were located and developed, and with them the mine entered upon a new era of prosperity. The past year has been a banner year, but if no unforeseen delays or accidents occur, we predict that the coming year will be even more prosperous.

Respectfully submitted,

A. R. GORDON,
Mine Superintendent.

General Summary of Ore Reserves.

Vein.	Total Tons Ore.	Ore & Waste.	Total Value.	Value Per Ton At Mill.	Aver. Percent. Waste.
Candelaria	19,618	23,998	$488,266	$21.13	15.0
Capitana	8,410	11,424	416,427	36.53	41.0
North	730	1,025	28,478	27.78	40.4
Culebra	148	238	6,127	25.75	85.0
Colonia	2,650	4,078	181,383	44.47	54.0
Socorro	1,593	2,143	54,595	25.47	34.0
Concepcion	13,840	17,299	506,769	29.29	25.0
Nueva	2,539	3,538	117,086	33.09	40.0
San Miguel	43,425	52,158	1,242,634	23.82	20.0
Rosario	4,312	5,187	94,301	18.08	19.0

TOTAL TONS OF ORE	97,365
Total tons of ore and waste	121,088
TOTAL VALUE	$3,168,739.00
VALUE PER TON AT MILL	26.16
Average per cent. of waste	24.3

San Juancito, Honduras, November 12, 1911.

To the Manager, San Juancito.

Dear Sir:

In answer to your verbal request of October 25, I beg to submit the following report, which deals, more or less, with the general conditions at the New Rosario Works:

Mill Site.

The ground was broken for the new mill in February, 1911, and when the writer arrived on April 10 some 600 cubic yards of surface soil had been removed, exposing a decomposed shale, which necessitated going 11 feet further into the mountain, so that a hard shale footing could be obtained for the heavy foundations and retaining walls.

On account of the broken up formation of the shale on the west side of the excavation and the topographical contour of the site, it was deemed advisable to shift the original center line of the mill to the east, thereby making the retaining walls and buildings fit the ground more evenly, and also give them a better footing, as the formation on the east side of the excavations was better suited for foundations.

The center line of the high agitation tanks was also shifted to the east, 100 feet from the original center line of the mill, as you will note by the topographical map of that section that it was quite out of the question to utilize the deep gully for the heavy foundations that the above tanks require.

The solution tanks and refinery were placed approximately 250 feet to the west of the proposed sites, and on the original proposed Casa Blanca site, as it was found that not only an estimated saving of 30,000 pesos ($12,000 U. S. currency) was effected in doing away with big excavations and large retaining walls but practically eight to ten weeks' time was saved in getting the solution tanks under construction.

The location of all other buildings for the New Rosario Works was carefully planned so that both time and expense could be saved without sacrificing a high efficiency in the operation of the works.

Preliminary Work.

The preliminary work consisted of 1,200 feet of inclined tramways, two storehouses, 4,000 feet of track work for railroads, two rock quarries, storage platforms for 100,000 feet of lumber, two machinery platforms, machine and blacksmith shops, carpenter's framing shed, three sand storage bins for 250 tons of sand, three water storage tanks, five-stamp mill, with Blake crusher, for crushing quartz to No. 4 mesh for sand; air line from Peña Blanca for supplying air to rock drills and riveting machines, office and tool house, three derricks for handling material, 300-ton crushed rock storage bin, and concrete mixing plant, built on the gravity plan, which consists of sand and rock bins; hoppers, rock crusher and one-half cubic yard Smith concrete mixer. It may be interesting to note that approximately 50 tons of rock and 12 tons of crushed quartz for sand are delivered by rail to the works daily, and that the total amount of rock and sand delivered to date are 4,500 tons and 1,800 tons, respectively.

The concrete mixing plant has been a tremendous time and money saver, as the high figure of 80 cubic yards of concrete has been poured in a single day, which means that 160 tons of ingredients were handled by twenty men during that time.

Excavations.

Eleven thousand two hundred and seventy-two cubic yards of dirt and 1,789½ cubic yards of rock have been excavated to date, and it is estimated that 85 per cent. of this work is completed.

Foundations and Retaining Walls.

The foundations and retaining walls being the most vital points in the new mill construction, no labor or expense has been spared in getting this work completed in the earliest possible time. To date there has been placed 1,897 cubic yards of concrete in the mill proper, 396 cubic yards of cement and lime mortar masonry in the foundations for the solution tanks, and 1,127 cubic yards of lime mortar masonry for the tank foundations, building foundations and retaining walls.

Inasmuch as the slope of the ground at the mill site has an

average of 34 degrees, and that 11 feet of surface soil had to be removed to get proper footings for the foundations and retaining walls, it is obvious that slight changes had to be made from our Consulting Engineer's original plans, which in no way changed the scheme of having the mill constructed with a 39-degree slope.

Mill Buildings and Tanks.

The mill buildings and tanks are being constructed and machinery installed as rapidly as the foundation work will permit, and I do not believe that I am too optimistic in stating that the completion of the mill at an early date will not be held up on account of the above work.

Labor.

Naturally, the mill could be constructed in a somewhat shorter time than it will take under the present shortage of labor. However, as sufficient labor is apparently unobtainable, steps have been taken to install as many labor-saving devices as possible. The success which, in spite of certain difficulties encountered, has attended this scheme is distinctly encouraging, especially in view of the fact that we are now handling about twice the amount of material which we did formerly with the same amount of men.

Though the supply of native labor has been short for our requirements, every effort has been made to better their condition and also to encourage them coming here from other parts of the country.

Conclusion.

As regards the completion of the new mill by March 1 next, I have every reason to believe that with the continuance of present conditions the new mill will be ready for operation at that time, and, in closing, I wish to state that at the present writing I see no difficulties that could arise that would tend to postpone the above date unless some extraordinary condition turns up which we could not foretell or forestall.

Respectfully submitted,

BASIL D. DAVIS,
Superintendent of Construction.

New York, December 1st., 1911.

To the President and Board of Directors of the New York and Honduras Rosario Mining Company.

GENTLEMEN:

In putting before you the financial condition of your Company at the end of the fiscal year, September 30, 1911, attention is directed to the following:

Due to the very large expenditures for the improvements of your property, such as the building of the New Rosario Works, and the many other constructions and buildings related thereto, besides executive and employees' quarters, improvements in the mine, etc., only two dividends of 3 per cent. each were declared during the past fiscal year.

The total expended during the year for these improvements, approximates $298,321.00.

To appreciate better the volume of material shipped for these new constructions, it may be stated that this amounted to a total of approximately 3,852,000 pounds, or 1,926 tons. Some of the single pieces weighed as much as six tons, a most difficult weight to transport across the country; yet this was accomplished successfully and without delay.

The amount realized from our product is $887,169.59, the net result of 1,395,137 ounces Silver and 8,104 ounces Gold. This is the yield of 35,813 tons of ore worked, and for comparison is 812 tons ore less, 9,306 ounces more Silver and 2,492 ounces Gold less than previous year.

Our cash reserve on October 1, 1911, was $132,800. This is lower than for many years, yet in view of the two dividends paid and the amount expended for improvements, all without occurring any indebtedness, this reserve may be considered very satisfactory.

With the completion of the New Works but a few months away (78 per cent. was completed December 1, 1911), with the attending reduction of expenditures for construction and increased production, this reserve should steadily increase to the point where dividends may be resumed with regularity.

For more details as to finances, you are respectfully referred to the report of a Security Audit Company, annexed hereto.

The inventory values in Honduras of fixed assets are greatly increased, due to the expenditures for the New Works and larger ore reserves. During the coming year, however, your surplus ledger account will be materially decreased, since when the New Mill is in operation, nearly the total inventory value of our present works will be written off, as this will then have no immediate value for us, but will be held in reserve to sell, etc.

A perusal of the Mine Superintendent's report, with its attending splendid showing of ore reserves, with the completion of the New Work, which will permit of working these reserves at a much lower cost than heretofore possible, there is every prospect that your Company is on the threshold of the most prosperous period of its history.

In the notice sent to Stockholders is described the plan to increase your Capital Stock from $1,500,000 to $2,000,000, which is to be submitted to the Stockholders for action at a special meeting called for the purpose on December 20, 1911. As there is every reason to believe that the Stockholders will act favorably on this plan, they will receive their additional stock as soon as the necessary formalities have been accomplished.

Respectfully submitted,

ERNEST SCHERNIKOW,
Treasurer and Acting Secretary.

New York, December 1st., 1911.

To the President and Board of Directors of New York and Honduras Rosario Mining Company, New York.

GENTLEMEN:

In compliance with your instructions we have audited the books of account of your corporation, kept at its office in this city, for the fiscal year ended September 30, 1911, and certify, subject to the correctness of the statements received from the mines as to the value of the inventories and other assets there, that the same are correct and in accordance with the Balance Sheet, Statements of Profit and Loss and Surplus, annexed hereto and forming part of this report.

Respectfully submitted,

THE SECURITY AUDIT CO. OF NEW YORK.

GEO. WEAVER,
Vice-President.

New York and Honduras Rosario Mining Company, New York.

Balance Sheet, September 30th, 1911.

ASSETS		
Cash in Bank and on hand in New York	$ 2,336.81	
Accounts Receivable	1,372.00	
Superintendents Account in Honduras	89,222.96	
New York City Bonds, 1911, at par	50,000.00	
Loan to Government of Honduras	18,908.41	
Bullion	149,928.00	
Ores, Slimes, etc	190,493.00	
Supplies	196,012.65	
	$ 698,273.83	
Mines, Real Estate other than Buildings, Concessions, etc	1,712,306.49	
Tramway and Gravity Road	22,870.00	
Buildings	37,116.00	
Machine Shop	22,738.00	
Mill Machinery	598,578.21	
Power Plants	315,765.18	
Transportation and Freighting Equipments	9,009.00	
Implements, Tools and Appurtenances at Mines	41,182.00	
Property at Agencies	16,640.00	
Live Stock	4,885.00	
Office Furniture in New York and at the Mines	9,003.64	
LIABILITIES		
Acceptances, Notes and Accounts Payable		$ 129,584.97
Reserve for Depreciation		219,248.50
Capital Stock		1,500,000.00
Surplus		1,639,533.88
	$3,488,367.35	$3,488,367.35

New York and Honduras Rosario Mining Company, New York.

Statement of Profit and Loss for the fiscal year ended September 30th, 1911.

To Bullion and Ore on hand or in transit October 1st 1910	$ 290,287.33	
By Bullion sold during the year		$ 972,318.92
" Bullion and Ore on hand or in transit September 30th, 1911		340,421.00
To Operating Expenses	468,063.42	
" Balance, Gross Profit	554,389.17	
	$1,312,739.92	$1,312,739.92
By Balance, brought down		554,389.17
" Interest on Bonds		1,500.00
To Office Rent	2,700.12	
" Salaries	21,163.96	
" Directors Meetings	3,147.50	
" Stationery	296.76	
" Postage	600.00	
" Cables and Telegrams	835.63	
" Taxes	948.13	
" Honduras Examination	2,400.00	
" Interest on Loans	1,298.89	
" Miscellaneous Expenses	2,865.68	
	$ 36,256.67	
" Reserve for Depreciation	219,248.50	
" Balance, being Net Profit for the fiscal year ended Sept. 30th., 1911	300,384.00	
	$555,889.17	$555,889.17

New York and Honduras Rosario Mining Company, New York.

Surplus Account, October 1st, 1911.

By Balance, October 1st, 1910.....		$1,429,149.88
To Dividends paid:		
December 17th., 1910.....$45,000.00		
March 29th., 1911..... 45,000.00	$ 90,000.00	
By Net Profit for fiscal year ended September 30th, 1911 (see Profit and Loss Statement).....		300,384.00
To Balance September 30th, 1911.....	1,639,533.88	
	$1,729,533.88	$1,729,533.88
By Balance, October 1st, 1911.....		$1,639,533.88

Table Showing.

Bullion Production.		Dividends.	
1882	2,452.27		
1883	12,900.42		
1884	149,741.39		
1885	244,444.70		
1886	224,157.58		
1887	613,446.05	1887 No. 1	$ 37,500
1888	767,632.15	1888 Nos. 2 to 5	60,000
1889	590,189.55	1889 Nos. 6 to 14	150,000
1890	113.28		
1891	369,587.19	1891 Nos. 15 to 16	30,000
1892	614,498.67	1892 Nos. 17 to 21	165,000
1893	492,534.87	1893 Nos. 22 to 25	150,000
1894	392,485.92	1894 No. 26	37,500
1895	158,164.42		
1896	449,525.88	1896 Nos. 27 to 28	30,000
1897	568,872.06	1897 Nos. 29 to 40	180,000
1898	611,467.76	1898 Nos. 41 to 48	120,000
1899	798,994.77	1899 Nos. 49 to 60	180,000
1900	827,443.12	1900 Nos. 61 to 75	225,000
1901	780,760.18	1901 Nos. 76 to 93	300,000
1902	490,273.34	1902 Nos. 94 to 100	105,000
1903	436,818.29	1903 No. 101	15,000
1904	721,374.87	1904 Nos. 102 to 108	105,000
1905	993,065.39	1905 Nos. 109 to 121	180,000
1906	1,112,171.69	1906 Nos. 122 to 139	285,000
1907	791,347.62	1907 Nos. 140 to 153	210,000
1908	788,910.23	1908 Nos. 154 to 165	180,000
1909—10 months	636,500.00	1909 Nos. 166 to 173	120,000
1910	890,700.00	1910 Nos. 174 to 180	105,000
1911	887,169.59	1911 Nos. 181 to 182	90,000
Total	$16,417,743.25	Total	$3,060,000

REPORT

OF

NEW YORK & HONDURAS ROSARIO MINING COMPANY

NEW YORK, DECEMBER 1st, 1912

OFFICERS 1912-1913

W. S. VALENTINE. *President.*
LEWIS L. CLARKE, *Vice-President.*
SIDNEY ABENHEIM, *2ndVice-President.*
ERNEST SCHERNIKOW, *Treasurer.*
J. M. DeHART, *Secretary.*

BOARD OF DIRECTORS 1912-1913

SIDNEY ABENHEIM,
H. H. BABCOCK,
LEWIS L. CLARKE,
I. HEIDELSHEIMER,
Dr. J. RALPH JACOBY,
M. F. SOTO,
AMBROSE G. TODD,
W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1912-1913

LEWIS L. CLARKE, *Chairman.*
SIDNEY ABENHEIM,
H. H. BABCOCK,
Dr. J. RALPH JACOBY,
ERNEST SCHERNIKOW,
AMBROSE G. TODD,
W. S. VALENTINE.

Report of the Board of Directors of New York & Honduras Rosario Mining Company.

New York, December 1st, 1912.

To the Stockholders:

In coming before you this year with its Annual Report, your Board of Directors feels that it has much of interest to present. Much history has been made, much work done, and heavy expense incurred that bespeak a solid fundamental basis for the future economical operation of your property. A new era has been opened, with the probability of many more years of satisfactory results.

The prime and crowning success has been the completion of the new mill, with its hoard of ancillary buildings. This mill of twenty stamps, with its complement of tube mills, enormous cyaniding tanks, presses, etc., shows as complete a metallurgical plant as was ever erected in any place in the world where the extraction of gold and silver has been the goal.

In June last work was sufficiently advanced to permit of the preliminary test runs. These were completed in July, and steady operation inaugurated without a hitch of major importance, which certainly speaks well for the engineering and mechanical staff under which the mill was built. Later on in the operation of the mill, certain difficulties arose from the incrustation of Precipitates in the pipe conveying the value carrying solutions to the Precipitation Presses; but these resulted merely in a temporary delay in the recovery of a percentage of the products, and are now being rectified by the installation of pipe of a smaller diameter and other minor changes.

The Treasurer's report gives the figures of the cost of this work, and with the substantial reserve therein shown, you can feel that you have an organization bespeaking a very bright future.

Mine.

The General Agent's report, together with that of the Mine Superintendent, is hereto attached. These show that many hindrances have occurred to limit the normal development; yet when all other facts are considered, this is not a setback, because, fortunately, our ore reserves made in the past years are so far ahead of actual requirements. And now that every inch of compressed air available is being led to the ponderous drifting drills, which are driving in all directions on their mission of discovery and development, our development work will soon be brought to normal.

Note: Since the writing of the annexed reports, we have cable advice that the SOUTHWEST Crosscut has cut the vein and is in good ore. This alone demonstrates what your representatives have always maintained, namely, the great wealth to be anticipated from this development of the virgin southern territory.

The Mill.

In our introduction we have referred to this in a general way. Your Secretary's report describes some of the features of construction, and the General Agent's report gives the detail of the final closure of the old mill on July 9th last, and general statistics on the initial dropping of the stamps and experimental run of the new mill. These interesting data are called to your special attention.

Geology and Petrography.

In our last Annual Report we called attention to the completion of the topographical work, and the maps hereof are now in this office.

In continuation of this scientific study, V. F. Marsters, Esq., a geologist of high reputation, was engaged to make a thorough geologic and petrographic study of the general formation. Mr. Marsters sailed from New York on June 26th last, taking with him a complete supply of appliances for this work, together with everything necessary for microscopic examination. He is now in the field with a proper staff, and although his mission is far from complete, very interesting data has already been developed from his work.

With the completion of this work, we feel that your Company stands second to none in the mining world in scientific development of its property.

Financial.

The Treasurer's report gives the financial condition of your Company at the end of the fiscal year, which should be considered as extremely satisfactory.

You have received notice of the dividend declared on December 9th. This represents the first quarter of the new year, and we feel justified in saying that we look forward to a regular declaration of dividends henceforth.

The credit of your Company stands on a par with that of past years.

Reports.

The various reports accompanying this message are replete with valuable information, and we recommend same to the careful study of every stockholder.

Management.

Under the broad principle of keeping a direct supervision over your works, your Secretary, J. M. DeHart, Esq., left New York on November 16, 1911, to visit the property, spending several months in general examination. During this visit, and on account of the temporary absence of the Manager, Mr. DeHart took over the management. He returned in March last, and in April your Vice-President, Louis F. Valentine, Esq., left New York for the mines, also on a trip of inspection, and after going into the inner management, found it necessary to accept the resignation of the then manager, taking personal charge. He is still acting as General Agent of the Company.

The various departments of the works are under competent Superintendents and assistants; in fact, we feel proud of having an efficient staff under whom the general organization of your business is run.

For the Board of Directors,

W. S. VALENTINE,
President.

San Juancito, Honduras, October 1, 1912.

To the President,
New York, N. Y.

Dear Sir:

We take pleasure in submitting herewith the following report describing the work performed on the Company's property during the year ending September 30, 1912.

Management.

The writer arrived at San Juancito on May 30, 1912, on a general visit of inspection. Shortly after his arrival he found it necessary to accept the resignation of the then Manager, and temporarily assumed the position of General Agent of the Company.

We are pleased to state that we found a general good feeling amongst the employees, and that the sudden change of management in no way affected the progress of the work.

Too high compliment cannot be paid the general staff, all of whom are keenly alive to the interests of the Company, and individually to that part of the work entrusted to them.

Strike.

The underground operations were brought to an extremely disappointing end, due to the general strike of the native miners, which was declared on the 9th of September, and of which you were advised by cable. With the new mill just entering upon its new era of successful operation, and the preparation made underground for handling a greater tonnage, the strike per se brought on almost disastrous results.

Contrary to all expectations, and unlike the experience of other years, this movement lasted long enough to cause the stoppage of the mill for over 21 days and reduced the scale of operations in the mine to almost a complete standstill. The strike was by no means a well organized affair. The miners chose, however, the most opportune time, and taking advantage of the demands made on the mine to supply the increased tonnage, struck for higher

wages, and managed to draw away the majority of hand drillers, and all the machine men, timber men, carboys and shovellers.

Considerable correspondence has been written on this subject and we therefore deem it unnecessary to repeat herein. Ample authority was bestowed upon your representative to act as occasions demanded. The shutting down of the entire works, the results of which were immediately felt at the capital and surrounding country, aided in breaking up the strike, and although at one time the feeling became so tense and the riotous conditions of the strikers made necessary our seeking proper protection from the Government of Honduras, no damage worth mentioning was done to the property, which was at all times well guarded.

Upon the resumption of work by a number of the miners, there followed a like move from the greater part of the striking element, after many futile attempts at blockading the roads leading to the mine. With the arrival on the property of the 10 foreign machine men, whom you saw fit to send down in this emergency, work underground was re-established on a small scale and sufficient ore was mined to maintain 10 stamps in operation. On October 2d we informed you that a sufficient number of men were available to resume work. On the 12th 15 stamps were dropped, and finally, on the 29th of October, we advised you that both mine and mill were in full operation and that conditions were once more normal.

The strike, we believe, has established a precedent which makes necessary a careful study of the labor problems at San Juancito and the advisability of engaging a large number of foreigners, not only to protect ourselves against further strikes, but to insure rapid prosecution of the work, is now under consideration.

The Mine.

During the year ended September 30, 1912, the exploration work performed on the different veins and crosscuts amounted to 10,282 feet.

This total footage shows a drop compared with the figure of 13,353 feet of the year previous, due principally to the extreme scarcity of water power available during the months from March to July. The drought was decidedly more pronounced this year,

resulting in that the Compressor Plant could not run to full capacity.

The Development work is distributed as per following table, to show the advance made on each vein and cross cut:

San Miguel	2133.5
West	1654.5
Candelaria	1235.
Concepción	973.
Catalina	658.5
Southwest	651.
U.900 Hdg. & cross-cut	611.5
Rosario	438.
San Vicente	397.
Guadalupe	358.
Esperanza Crosscut	258.
South Cross-cut	166.
Lower 200 Cross-cut	14.
Crucero Cross-cut	734.
Total	10,282.

The total costs for Development work performed during the year amounted to 179,291.17 pesos, or a total cost per foot of 17.43 pesos. The cost per foot of the previous year was 15.60 pesos.

As in the previous year most of the Development work was confined to the northwestern section of the mine, the rock being of the same hard, tight nature, and taking into consideration that during the months of from March to June hand drilling took the place of machine drilling to a large extent, the increase of pesos 1.83 per foot is readily accounted for.

The more important Development was assigned as in past years to foreign machine men, with the result that the same good progress has been maintained with the same high degree of efficiency and economy in the work.

A total of 39,258.15 dry tons of ore were delivered by the mine as against 35,813.29 in the previous year. 28,828.48 tons were sent to the old mill and the balance of 10,429.67 went to the new mill.

The summary of the mining costs in pesos for the year were as follows:

	1910-11.	1911-12.	Per ton of ore. 1911.	1912.
Labor	515,793.74	515,798.17	14.40	13.13
Supplies	215,725.72	229,602.25	6.02	5.85
Total	731,519.46	745,400.42	20.42	18.98

From this it will be seen that quite an economy in the per ton costs of mining has been made during the year. With the greater tonnage required for the new mill, and the total mining cost not materially increasing as is shown by our present work, a further reduction in the mining costs for the ensuing year is certain to result.

Summarizing the stoping, tramming and timbering accounts for the same period we obtain the following figures in pesos:

	1910-11.	1911-12.
Stoping	5.63	5.88
Tramming and Car	1.26	1.84
Timbering	1.68	1.69

Aside from the comparison of costs previously given, and the by no means unsatisfactory results shown thereby, special stress must be laid on the fact that the mine, during the construction of the new mill, suffered many drawbacks. It was called upon to furnish compressed air for rivetting purposes. The serious problem of furnishing sand for concrete work was finally solved by installing a 5-stamp battery to crush quartz, which was mined and delivered to the portal of the L. 650 level. The installation of the drinking water and fire system was done by the Mine Department, and on the whole, the part it played in the new work was a vastly important one.

The physical condition of the mine, its Ore Reserves and future possibilities are discussed extensively in the report of our Mine Superintendent, and therefore we will not make any further comments thereon.

Reduction Works.

A total of 39,258.15 dry tons were treated during the year. 28,828.48 tons correspond to the work of the old mill and 10,429.67 tons to the new mill.

The total production for the year amounted to 1,387,077.86 ounces silver and 6,739.42 ounces gold, as against 1,395,136.95 ounces silver and 8,103.00 ounces gold for the previous year. With a valuation of silver at 50 cents per ounce and gold at $20.00 the total product amounts to $828,327.41 U. S. C.

The product consisted of 1,171 cases of Cyanide Precipitates, weighing 122,134.31 dry pounds; 75 bars of Bullion, weighing 110,908.76 ounces Troy, and 44 cases of diverse cleanings from the old cyanide plant, weighing 3,622.30 dry pounds.

Included in the production for the year at the old mill are the final recovery from the circulating solutions, and also 44 boxes of cleanings, before the cyanide plant was definitely turned over to Messrs. Jurgenson & Co., contractors engaged in general recovery work.

For the comparison of costs this year with those of the previous, we must separate the new mill costs from those of the old mill, and we have taken therefore only nine months as a basis for comparative data. During the nine months from October to July, 1912, our mill costs (in pesos) were as follows:

Labor ...	67,205.76 or 2.33 per ton this year.	2.27 per ton last year
Supplies..	193,996.96 or 6.72 per ton this year.	6.89 per ton last year
Totals..	261,202.72 or 9.05 per ton this year as against	9.16 per ton last year

A further reduction of 10 centavos in the milling costs for the period above mentioned speaks well for our old equipment, and notwithstanding its dilapidated condition, and increasing amount of repairs from year to year, it outlasted the time set for its well-merited shutdown and was definitely abandoned on the last day of July, after a practically uninterrupted and successful run of 24 years.

Tramway.

This installation only worked during the first nine months of the year, during which time it conveyed 28,828.48 dry tons to the

old mill. A comparison of the per ton costs with those of the previous year shows the following in pesos:

	Per ton 1910-11.	Per ton 1911-12.
Labor	0.82	0.91
Supplies	0.27	0.34
Total	1.09	1.25

The per ton cost as above is figured on a much lesser tonnage transported by the Tramway with the same running expense and increased cost of repairs.

The total cost for the year amounted to 36,047.58 pesos. The Tramway was abandoned with the starting of the new mill in July last, and it can be said that an expenditure of not less than 50,000.00 pesos annually will thus be done away with.

Surface Department.

The gross expenditure for this department amounted to 234,771.88 pesos, as against 228,236.94 pesos during the year previous. The cost per ton, as compared with the year previous is as follows:

	1911-12.	1910-11.
Labor	5.50	5.69
Supplies	0.48	0.68
Total	5.98	6.37

or a saving of pesos: 0.39 per ton of ore, in favor of the year just past.

As in the past, the Surface Department has been responsible for the general upkeep and repair work extending over the entire property. Its principal function was that of repairing and maintaining in good condition the main roads for freighting the last of the heavy machinery. A total of 15,796.92 pesos were spent during the year on road work alone. This includes the maintenance of the Tegucigalpa cart road and Potrero Ramos Saw Mill road, over which latter close to two million feet of lumber were transported for the new construction work.

The expenses of the Surface Department embrace also those incident to the running and maintenance of hotels and messes, which, due to the increased number of men during the construction period and higher cost of living, form quite an important item of expense.

Recapitulation of Costs in Pesos.

	1910-11.	1911-12.	
Mine	20.43	18.98	
Tramway	1.09	1.25	
Mill	9.16	8.65	both mills
Surface	6.37	5.98	
Total	37.05	34.86	

or a saving of 2.19 per ton of ore for the year under description.

New Rosario Works.

On the 18th day of June your new 200-ton mill dropped its 1,800-pound stamps for the first time on a series of preliminary test runs which were to reveal the salient working features of the machinery and serve for a basis upon which to lay the tentative course of future operations.

The trial run was conducted in a most thorough manner and but few flaws and weaknesses were encountered. As great a part of the machinery as could then be put into operation was tried out and found to work in a most satisfactory manner, and on July 1st the regular run was started. Before passing on to the general statistics and comparison of costs, a word must be added about the construction.

Strength and solidity were fundamental principles in this undertaking. Serious difficulties seemed to be almost inevitable when the excavations disclosed rock footing at a far greater depth than was originally figured, and therefore the enormous quantities of sand, rock and cement consumed for concrete foundations, anchoring the mill to a steep slope, are not surprising. Invariably, each step required a concrete retaining wall, and but a vague idea can be had as to the nature of the ground encountered when it is said that a number of the excavations for

the High Agitation Tanks and Dorr Tanks attained a depth of 28 and 35 feet, respectively.

The machinery is of the most modern type and the stamping equipment the heaviest of its kind in use on the American Continent. Notwithstanding that skilled labor was brought in from the United States, and that many labor-saving devices were installed to expedite the work, many drawbacks occurred during the various stages of construction, and the completion was thus retarded several months beyond the date fixed for the commencement of operations.

No final conclusion can be drawn from the results of the work of the new plant during the first three months from July to September, inclusive. Certain minor difficulties have arisen in the different phases of treatment of our ores, which although not serious, demand that a few changes be made in the system, and that further study be given the question of economical running; on the other hand, the mechanical adjustments, such as can be justly ascribed to any new plant entering for the first time upon steady operation, caused many irregularities in the work of the first 2 months.

However, the results thus far obtained have been carefully recorded and sent you in the form of monthly reports from our Mill Superintendent, which contain highly interesting information and from which it will be seen that the machinery has stood the test and the batteries have shown greater capacity for handling the daily tonnage. A comparison of the per ton costs in pesos is herein given, and whilst, as previously explained, our new milling operations have by no means reached that stage wherein the highest degree of efficiency and the minimum of expense can be coupled to form a basis for ideal comparison, the saving, as shown by the following figures, is indicative of what may be expected wthin the coming year.

	Old Mill.	New Mill.
Labor	2.33	2.22
Supplies	6.73	5.28
Total	9.06	7.50

A total of 10,429.67 dry tons, with an average assay of 25.19

oz. ag. and 0.163 oz. au., were delivered to the New Mill. The average value per ton was $15.96 U. S. C.

The total recovery was as follows:	
200,001.53 oz. silver at 50 cents	$100,000.76
1,289.70 oz. gold at $20.00	25,794.00
Total	$125,794.76

If to this figure were added the values remaining in circulation and precipitates in the pipe lines, conservatively estimated at $24,000.00, making a total of $149,794.76, a total actual extraction of 89.99 per cent. would be attained.

The average value per ton of ore delivered to the old mill was $27.88, whereas the value per ton to the New Mill for the period under discussion averaged $15.96, making therefore unnecessary any further comparisons to show the enormous advantage derived from the New Mill and proving beyond a doubt its ultimate success.

During the year under description the amount of 1,182,683.44 pesos was spent on the construction of the New Mill and other installations, as follows:

Cash expenditures, including freights	465,175.06
Building material and supplies	717,508.38
Total	1,182,683.44

The expenditures during the year 1910-11, as per cost sheets forwarded, amounted to 343,590.08 pesos, which added to the foregoing gives a total of 1,526,273.52 pesos. In this, figures the cost of all machinery and supplies especially shipped for the New Mill.

A General Cost Sheet, embracing all expenditures since the commencement of construction, up to and inclusive of September 30, 1912, has been compiled and is now in your possession.

Under the heading of "New Rosario Works" we have incorporated all the construction without the mill proper and pertaining to the erection of employees' quarters, dwelling houses, hotel and club house, warehouses, shops, etc. The major part of this gigantic undertaking has been finished during the year ended

September 30, 1912, and with the completion of the Mill, its principal annexes and most all the buildings above mentioned, there remains but little work in connection with new construction.

General.

Mention has already been made of the Cyanide Legislation and the effect which this action would have had on the mining industry of Honduras in general, had the full purport of the Congressional decree been adhered to. In order to comply with the law, however, a certain amount of work had to be done to take care of the tailings coming from the New Mill, and to prevent their being discharged into the San Juan River, a flume or canal 6,800 feet long was built to convey them to a gulley through which the tailings flow and empty into the Choluteca River, at a point distant 2½ miles from San Juancito. An enormous amount of fencing in was necessary, and the work has been of a costly nature, but we will have now fulfilled our obligations with the Government and established at the same time better relations with the neighboring Municipality of Cantarranas.

The old installation at San Juancito has been partly dismantled and the machinery is now being placed under cover, to be sold or disposed of in the manner you may see fit. Some of the old buildings and shops have been taken down and the lumber used for general repairs throughout the property. The old quarters have been assigned to some of the better class of our native employees, and of the dwelling houses remaining, those which are still serviceable will be rented.

The Power Houses have received the usual amount of care and attention, and we are pleased to advise that but few shutdowns occasioned by repairs to the machinery were necessary. Likewise, the flume lines were not harmed to any extent by the storms of the past rainy season.

The Mine equipment, Compressor Plant and Electric Haulage systems have rendered satisfactory service throughout the year. Preparations are now under way for running the new electric locomotives on the L. 650 level, and much time and expense will be saved when this new service is inaugurated.

Deserving of special mention, and highly commendable, is the

work accomplished by the staff of engineers at San Juancito on the construction work, the result of which is a splendid up-to-date mill and cyanide plant.

The importation of heavy parts for our new machinery must be looked at from another standpoint, and now that but few replacements can be conveniently handled by means of mule-back transportation, and as these must necessarily be at hand, we most strongly urge the consideration of a small foundry, whereby the many tons of scrap iron and accumulation of parts from old, worn-out machinery can be utilized, thus insuring a great saving in the purchase of these parts abroad and in their costly transportation across the country.

We desire to express our great appreciation for the material help we have received from the Board of Directors and Officers of the Company in furtherance of our work, as well as the satisfaction with which we view the thoughtful consideration manifested in behalf of our efforts.

With the satisfactory condition of the mine as viewed by the Mine Superintendent in his report, the Ore Reserves, and the improved methods and far better facilities for the pursuance of mining and milling operations, we feel justified in predicting that a most prosperous year will follow.

Respectfully submitted,

L. F. VALENTINE,
General Agent.

Note: The peso equals 40 cents U. S. Currency.

San Juancito, Honduras, October 1, 1912.

To the Manager,
San Juancito.

Dear Sir:

We take pleasure in submitting herewith the following brief resumé of the work performed in the Mines and Concessions of this Company during the fiscal year ending October 1, 1912.

Ore Reserves.

The reserves for the coming year show 127,850 tons in place, and 164,216 tons, with which about 29 per cent. waste is included. These calculations are based on 13 cubic feet of vein matter in place per ton.

The value per ton, as delivered to the Rosario Mill, is $17.65 U. S. C.

NOTE—The above figures of tonnage do not include low grade ore reserves. Subsequent report from the Mine Superintendent states that there are 188,500 tons of low grade ore with an average value of $8.50 (U. S. Currency) per ton.

A general average of all ore reserves shows:

164,216 tons averaging	$17.65	per ton.....	$2,898,412
188,500 tons averaging	8.50	per ton.....	1,602,250
Total— 352,716 tons averaging	12.76	per ton.....	$4,500,662

Further discussion on the subject of ore reserves will be found under "General Remarks."

Ore Extracted.

The total quantity of ore delivered to the old and new mills is as follows:

Total cars of wet ore.....	74,753
Average car capacity.....	.58
Wet tons received at mills.....	43,029
Dry tons received at old mill.....	28,828
Dry tons received at new mill.....	10,430
Difference, due to.....8.8 per cent moisture.	

Development.

	Feet.
Drifting	6,480
Raising	1,831
Cross-cutting	1,971
Total	10,282

You will note that the number of feet driven is considerably less than last year, due to the fact that numerous difficulties beset us which were beyond our control, the most serious being shortage of power, owing to an exceedingly dry season, shortage of labor, and the general labor strike during September and October.

Veins.

The Buena Ventura, Catalina, Culebra, North, Nueva, Northwest and Socorro are veins which produced some good ore during the year; but as they are all well developed, little or no development work was done in them. Collectively, these veins can supply an important amount of the daily tonnage, but singly none could become a large producer.

Candelaria Vein.

Development in this vein has been confined almost entirely to the levels below the Peña Blanca. At the Lower 100 level, Block 37, an important body of ore, estimated at about $13.00 per ton, was found, and it was later cut at the Lower 200 and Lower 300 levels.

Ore for the old mill was principally stoped from the Peña Blanca, Upper 100 and Lower 100 levels, and additional stopes on these levels, as well as on the Upper 500, Lower 200 and Lower 300, were started when the new mill began treating a larger tonnage of lower grade ore.

The only sources for development lie directly above the Upper 500 and below the Lower 300 levels, and of the two, the territory above the Upper 500, which is several hundred feet in extent, holds out the best possibilities.

Capitana Vein.

Considering its narrowness and rather limited extent, this vein has produced an important amount of very high grade gold ore. It is developed vertically for over 600 feet above the Peña Blanca level, as well as laterally between its two limits, the San Miguel and Guadalupe veins. The work in the upper levels shows that, although the vein retains its values, it becomes too narrow to be of stoping importance. This is so general that no more development has been undertaken, and, therefore, outside of what ore is at present blocked out in this section, no more should be expected.

The territory immediately below the Peña Blanca, however, holds out good possibilities for future ore, and this will be developed during the coming year through the San Miguel shaft.

Colonia Vein.

The Colonia vein continues to be a producer of high-grade ore in a small way, the ore coming from sections developed some time ago. The only remaining sources for development lie north of the Lower 300 level and below it. The region below can best be opened up by means of a small shaft, and the Lower 300 North heading should be extended northward for at least another 400 feet.

While the Colonia vein still contains an important amount of high-grade ore, this occurs in such small width that it is only when there is an unusual amount of miners employed that any appreciable quantity can be stoped.

Concepción Vein.

This vein has proved to be an important find, and during the past year was the source of the largest amount of high-grade ore, all of which came from and above the Peña Blanca level. A tunnel is being driven from the surface to the south to open up the ground below the Peña Blanca, and while not much high grade ore is expected, we believe an important quantity suitable for the new mill will be encountered. This tunnel will eventually enter the San Miguel and connect with a similar tunnel which is being driven from the shaft to meet it.

San Miguel Vein.

The greater portion of the tonnage milled during the year came from this vein from stopes at and above the Peña Blanca level.

The most profitable development during the year has proved to be in the southern section, and in the shaft. All this ore is low in grade (about $15.00); but as the vein is wide, hence the mining is cheap, and as there appears to be a persistent body of it, there will be a good margin of profit from it.

Rosario Vein.

What ore this vein produced during the year came from old workings at the Lower 400 and Peña Blanca levels.

The most important development was confined to the Peña Blanca in blocks 44 to 38 inclusive. This consisted of widening and retimbering completely the old tunnel, which is about 400 feet long, and advancing the heading about 200 feet further to the east. The vein has very good width (about 6 feet for over 200 feet), but is very low in grade. As it is located on the main line of the haulage system, and is very easily mined, we believe a portion of it can be stoped with a fair margin of profit. That section of the old working east of those just described, and located in blocks 33 to 27 inclusive, is extremely difficult to get at, and, therefore, no work is being done here until the Upper 150 east heading enters it.

We have not been able to do as much recovery work as was planned, because for such work skilled timbermen are needed, and these for the past year have been very scarce.

Guadalupe Vein.

Stoping of low grade ore for the Rosario mill is being done at the Lower 200, Lower 300 and Lower 400 levels, and these sections hold out good promise of being important sources for ore of this grade in the future.

Several hundred feet of development was done at the Upper 100, Block 39, level, and this opened up some high grade ore, which proved, however, to be rather narrow.

West and Southwest Veins.

Our monthly reports have kept you posted as to the details of the work in this section of the mine.

The West vein, which for a number of years was the mainstay of the mine, suddenly ceased, being so upon all the westerly headings running into barren, and in some places faulted, ground.

We have reopened the old drift at the Peña Blanca level, drifted through the unproductive ground, and have found what we call the Southwest vein, which very likely is the continuation of the West, but with a decidedly southwestern direction. From 90 to 100 feet of very rich ore was cut, and the vein then continued for about 300 feet in poorer material, which has possibilities of profit if the vein maintains the present width. Badly crushed territory was next encountered, in which the vein has lost both its strength and values, and up to this date no change has occurred.

Should the same conditions hold true in the Southwest that did in the West, there should be better ore and much more of it above the Peña Blanca level. To us this looks quite possible, and, therefore, several raises are being run to demonstrate it beyond a doubt.

This strike is the most important of the year, and one which future development may prove highly profitable.

Cross Cuts.

Esperanza Vein.

During an examination of the surface, we ran across some old workings for many years supposed to be on the West vein, but which we proved belong to an entirely different one not as yet explored at depth and about 500 feet further to the south. Upon sampling, good gold assays were obtained, and these, with other favorable features, at once led us to start crosscutting at the Upper 700 and Peña Blanca levels.

No predictions can yet be made as to what these cross cuts will disclose, but we will say that, should their showing be as favorable as that in the surface workings, this vein will become a valuable addition to the mine. We will refer to it hereafter as the "Esperanza Vein."

South Development.

Under this heading is embraced all the ground south of the Catalina workings. Several crosscuts have been run into this territory; but as it is so extensive, we have deemed it advisable to stop further work until our geologist obtains some important data which may be the means of saving much time and expense in the future.

Crucero Cross-Cut.

All the work this year has been made in shale, and for the last 300 feet this became so soft and badly crushed that heavy timbering had to be resorted to, and as this had to be kept within a few feet of the heading, it caused no little delay in the work.

As the territory to the northwest and ahead of this cross cut is fully 5,000 feet in extent, we have deemed it advisable to stop driving until our geologist can look the ground over first, as from his data much work in barren ground can be eliminated.

Mine Equipment.

The air compressors and electric locomotives have been rendering excellent service, and at an exceedingly low upkeep cost. About 4,000 feet of 24-inch gauge track has been added to the system at the Peña Blanca level, and over three-quarters of the new track at the Lower 650 or Rosario level laid. The pipe lines have been extended into all the important headings, and some sections have been relaid with pipes of larger capacity.

Due to filling of the space below the waste dumping trestle, it became necessary to move the revolving dumpers about 800 feet to the southeast along the old saw mill road, where it is expected there is sufficient room for at least two years.

The San Miguel saw mill, which is being run by compressed air, has readily supplied all the lumber needed at 35 pesos per 1,000 feet, against 60 and 65 pesos from the old site.

General Remarks.

While from the standpoint of gross production the past year has been a most prosperous one, the same cannot be said from the standpoint of ore reserves.

To say nothing of the recent labor strike, an exceedingly dry season and the usual shortage of labor, the mine during the construction of the new mill was further called upon to help out on the labor question, supply material which it could ill afford, and towards the end power also, with the result that development, as well as other work, has suffered. Besides taking second place during the mill construction period, the mine was still further called upon to give productions out of proportion to its reserves, and thus, while the average as figured for the year was $26.16 U. S. C. per ton, the average of ores treated the first nine months was $27.83 U. S. C. per ton, or 6.4 per cent. higher.

The quantity and average value per ton of the reserves as figured by us are always based upon proper blending of a comparatively small amount of high grade ore with a much larger quantity of material in which there is but little or no profit. Our experience has shown that, due to the peculiar ore occurrences, this low grade material often becomes richer, and occasionally pockets are struck that are very high in values. Thus it will be seen that it is highly expedient that as much of the low grade material as possible be mined as is consistent with expenses and dividends; but, on the other hand, if too large a proportion of high grade ore be extracted, as was done during the past year, the quantity and value of the reserves are bound to be materially reduced if not replenished by current development. At present we have too much of the poor ore on hand, and before the proper equilibrium can be established, this must be gradually stoped.

Under the circumstances, we do not question but that the abnormal production demands made on the mine, as also its being thrown into the background during the construction period, were justifiable. The old mill certainly had to be replaced, and quickly at that; but, now that the new mill is completed, we must have proper time for re-establishing the full development and again placing the mine on a normal basis in order to meet the large demands for ore.

The most important find has been the Southwest Vein. Although its discovery came too late in the year for much development to be done, the showing so far is very encouraging, and it will be our aim to develop it thoroughly during the coming year.

The development of the southern section of the San Miguel

has met with good success, and there is still an appreciable amount of this territory left which has good future possibilities. Outside of the shaft, no development has been done immediately below the Peña Blanca level. Ore exists in the floor which is known to be very rich, and it will be fully developed during the coming year.

Had it not been for the delays, it is quite possible that we might have had something of interest to say regarding the "Esperanza" vein. Its surface showing certainly has an encouraging aspect, and if it is at all indicative of what can be expected at depth, we anticipate a bright future for this section of the mine.

The past year has certainly been an unusual one. In its short space, a large mill, with its many ancillary buildings, was built and placed in operation. What this means, and the changes that had to be made, can only be fully realized by those closely connected with the work. In spite of such abnormal conditions, the mine has readily responded in the matter of adequate productions, out of which all expenses have been covered, and this is a record of comparatively few mines in the world. With the new mill bought, built and paid for, and most of the difficult problems solved, we feel that, in beginning the new year, your Company does so with a clean sheet, and you can rest assured that it will be our aim to place the mine on a better paying basis than ever before.

Respectfully submitted,

A. R. GORDON,
Mine Superintendent.

New York, December 1, 1912.

To the President and Board of Directors of the New York and Honduras Rosario Mining Co.

GENTLEMEN:

The fiscal year ending September 30, 1912, has been one of supreme importance for the future of your property, since the new mill was completed, together with the greater part of all the other work related thereto. The great importance of this accomplishment will be reflected in the form of increased product at lower costs during years to come, as well as the ability to treat lower grades of ore at a profit, a feature hitherto not possible with your old plant.

During the year there was expended for this construction 1,182,638.41 pesos, which, figured at 40 cents per peso, amounts to $473,055.35. The total cost of new mill and other new constructions and improvements relating thereto is $615,043.01 U. S. C.

For this well invested expenditure you now have the very latest type of modern reduction works with equipment complete in every detail, together with a new town containing buildings, shops and dwellings, all enclosed within a high board fence stockade, which gives absolute control to the management over everything.

In order to appreciate what this large improved equipment consists of, you are referred to the General Agent's report wherein full details are found. Attention is called to one item, i. e., over two million feet of lumber were used in this construction.

A total of 39,258 tons of ore was treated, yielding 1,387,077 ozs. Silver and 6,739 ozs. Gold, amounting in value to $944,-212.67 U. S. C.

On October 1st, the cash reserve, after deducting all obligations, was $135,000, a slight increase over a year ago. This may be considered extremely satisfactory in view of the amount of money invested in improvements and plant. And now that all construction work is completed and we are relieved of the burden of construction and plant costs, and with the material reduction of working costs made possible by our new plant and installations, the natural increase of our cash reserve should be

sure and substantial to the point where regular dividends may be resumed. (See Foot Note.)

For full details of our finances, you are respectfully referred to the Security Audit Co.'s report, attached hereto and forming part of this report.

With the abandonment of the old mill and plant by the inauguration of the new, part of their inventory values are correspondingly decreased, and which is explained in the above referred to auditors' report.

Respectfully submitted,

ERNEST SCHERNIKOW,
Treasurer.

Foot Note—At the date of this writing, this is borne out by the fact that our cash reserve, exclusive of all obligations, increased to over $240,000.

New York, January 22, 1913.

To the President and Board of Directors of the New York and Honduras Rosario Mining Company, New York.

GENTLEMEN:

We have audited the books of account of your corporation, kept at its office in this city, for the fiscal year ended September 30, 1912, and certify, subject to the correctness of the statements received from the mines as to the value of the inventories and other assets there, that the same are correct and in accordance with the annexed Balance Sheet and relative Income Statement.

Respectfully submitted,

THE SECURITY AUDIT CO. OF NEW YORK

GEO. WEAVER,
Vice President.

New York and Honduras Rosario Mining Company, New York.

Balance Sheet, September 30th, 1912.

ASSETS		
Cash in New York		32,211.39
Cash in Honduras .....Pesos	87,848.69	
Accounts receivable in Honduras "	54,921.85	
	142,770.54	
Deduct: Employees' deposits in Honduras .....Pesos	43,840.17	
"	98,930.37	
at 250	$39,572.15	
Add: Cash items in transit to Honduras	6,735.35	46,307.50
Bullion, Silver and Gold at net selling price (Silver estimated).....		129,000.00
Ores and Slimes, etc., at cost.....		42,075.36
Supplies		224,939.15
Loan to Government of Honduras....		18,908.41
Suspense Account		877.00
		494,318.81
Property Account:		
Mines, Real Estate, Concessions, etc.	1,508,394.00	
New Mill	615,043.01	
Power Plants, Saw Mills, Implements, Tools, etc.....	361,562.88	
Old Mill Machinery.....	50,000.00	2,534,999.89
		$3,029,318.70
LIABILITIES		
Acceptances, Notes and Accounts Payable		116,951.29
Capital Stock		2,000,000.00
Surplus:		
Balance, October 1, 1911.....	1,639,533.88	
Deduct:		
Stock Dividend 500,000.00		
Cash Dividends 30,000.00		
Written off for Depreciation, Old Mill, etc. 377,056.52	907,056.52	
	732,477.36	
Add: Net Profit for fiscal year ended September 30, 1912.....	179,890.05	912,367.41
		$3,029,318.70

New York and Honduras Rosario Mining Company, New York.

Income Statement for the Fiscal Year Ended September 30th, 1912.

INCOME		
Production of Silver and Gold sold during year		965,140.67
Deduct:		
Differences between Silver and Gold on hand or in transit at the beginning of year	149,928.00	
and at the end of year	129,000.00	20,928.00
		944,212.67
Differences between Ore and Slimes on hand at the beginning of year.	190,493.00	
and at the end of year	42,075.36	148,417.64
Gross Income		795,795.03
EXPENSES		
Wages, Supplies, Freight and other Operating Expenses, including Development	573,058.33	
Administration, Federal Corporation Tax, etc.	42,846.65	615,904.98
Net Income for year		$179,890.05

Table Showing.

Bullion Production.

1882	$ 2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
Total	$17,361,955.92

Dividends.

1887 No. 1	$ 37,500
1888 Nos. 2 to 5	60,000
1889 Nos. 6 to 14	150,000
1891 Nos. 15 to 16	30,000
1892 Nos. 17 to 21	165,000
1893 Nos. 22 to 25	150,000
1894 No. 26	37,500
1896 Nos. 27 to 28	30,000
1897 Nos. 29 to 40	180,000
1898 Nos. 41 to 48	120,000
1899 Nos. 49 to 60	180,000
1900 Nos. 61 to 75	225,000
1901 Nos. 76 to 93	300,000
1902 Nos. 94 to 100	105,000
1903 No. 101	15,000
1904 Nos. 102 to 108	105,000
1905 Nos. 109 to 121	180,000
1906 Nos. 122 to 139	285,000
1907 Nos. 140 to 153	210,000
1908 Nos. 154 to 165	180,000
1909 Nos. 166 to 173	120,000
1910 Nos. 174 to 180	105,000
1911 Nos. 181 to 182	90,000
1912 No. 183	30,000
Total	$3,090,000

New York City, N. Y., December 1, 1912.

To the President and Board of Directors of the New York and Honduras Rosario Mining Company.

GENTLEMEN:

The year just terminating represents unprecedented accomplishments in the administration and operation of your enterprise which should afford many hours of satisfactory reflection.

First, and above all, was the completion and successful operation of your New Mill. For stability, equipment, completeness and auxiliary apparatus to overcome lengthy and expensive shut-downs, there is nothing in any mine on the Western Hemisphere that will surpass it and few, if any, equal it.

With the knowledge and experience obtained during the writer's management of your property from 1907-1910, and the opportunity afforded him for inspecting the new Mill construction work in the early months of this year, it seems almost incredible that this work has been completed in the time consumed and at the expense entailed, particularly in view of the fact that your old Mill, which was in daily danger of collapse, was operated continuously and all your regular branches of operation were not seriously impeded or interfered with.

Your property is so situated in Honduras, that even under normal conditions unrelenting activity and alertness are necessary to maintain an uninterrupted prosecution of your work. The main contributing causes are primitive and limited freighting facilities, necessitating the employment of ox carts and mules for the transportation of every pound of material that is used a distance of about 120 miles over rough mountainous roads; a limited and comparatively inefficient supply of native skilled mechanics, and a topographical perspective that is magnificent from a tourist's standpoint but an intricate problem for an operator.

In the last year's reports reference was made to the tonnage of the material shipped for the new mill, which at that time was 1926 tons; 100 tons more will probably cover everything. The transportation of this material required almost superhuman effort. If we stop to consider that prior to the new mill under-

taking our maximum tonnage per year seldom exceeded 600 tons and in those times it was by the most assiduous work that the material was transported within a reasonable length of time after it arrived at the port, a fair idea can be formed of what was accomplished in the handling of freights when in less than a year the usual amount of operating supplies were forwarded and in addition thereto a tonnage that was in excess of any tonnage handled during any two years of the Company's existence. With all this there were hundreds of pieces weighing from 600 pounds to 12,000 pounds, and it is not so many years ago when the transportation of a single piece weighing 1,000 pounds was considered more or less impossible. It required money, animals and men, sometimes as many as 30 yoke of oxen and double that number of men on one of the heavier single pieces, and above it all ingenuity, activeness and alertness on the part of your employes; but everything was safely delivered and now there is not a part of the equipment—possibly with one or two trivial exceptions—which is not performing the function planned for it.

Extraordinary excavations were necessary, due to the steepness of the ground and the nature of the rock formation. Foundations consequently had to be massive and durable, and these foundations consumed more than 700 tons of cement, all of which was shipped from New York in small kegs weighing 125 pounds gross each. There were also used in these foundations 15,639 tons of rock and 6,087 tons of sand. The rock was quarried at different points on the property, the bulk of it being transported a distance of more than a mile by means of specially laid track and the employment of the mine electric locomotives when not used for the delivery of ore. All the sand was made from clean quartz. The quartz was broken down in the mine, trammed a distance of almost one mile, thence lowered by a gravity road 450 feet (vertical) to the Rosario Sorting Station, where a special 5 stamp mill was erected to crush it into sand. The sand was then washed and shoveled into the cars for delivery to the concrete mixing plant of the new mill construction almost half a mile away. This was an exaction almost unparalleled in the history of modern construction and a problem the solving of which taxed the ingenuity of the engineers employed. The erection of the 5 stamp mill was accomplished at no further

expense than a thorough over-hauling of scrap piles representing the accumulation of years of worn out parts and the adaptation of such parts as could possibly be used to practical purposes.

The delivery of heavy timbers and lumber was another feature demanding study and careful calculation; but it was successfully accomplished by the selection of the nearest timber supply, the construction of a wagon road with an average grade of about 5 per cent. for a distance of more than 12 miles, the erection of a complete sawmill equipment and the shipment of American mules and special lumber wagons from the United States.

Reference is limited to these very few of the multitude of extraordinary problems that had to be solved because the space and time required to do justice to all would be prohibitive; but it might be said and well said that a splendid achievement has been made. The complete and detailed cost sheet and photographs taken at various stages of the work, which are on file in your office, are graphic testimonies of what has been accomplished.

This new mill, with its modern equipment, its modern precipitation room and bullion refinery, the substantial, convenient and thoroughly fitted machine shop, electrical shop, laboratory and assay office, warehouses, office, dwelling houses and other auxiliary buildings is not only a monument to intelligent and judicious application of your stewardship for the welfare of each and every individual stockholder; but a means of almost immediately increasing the productiveness of your enterprise to figures far and beyond anything that might be considered as consistent with the total cost of the installation.

Other New Construction.

The San Juancito Power Plant, concluded during 1911, is a model in location, equipment and construction. It has run successfully and uninterruptedly since it started, and is absolutely indispensable for the satisfactory and continuous working of your new mill. Its connection with the Guadalupe Power Plant, permitting the operation of the two plants in unison and the distribution of the current from both plants over one transmission line, affords the economical employment of all the electrical current that can be produced in all parts of your enterprise, and,

should anything happen to either of the plants the arrangement is such that all the current produced by one of them can be utilized to the very best advantage, both in the operation of the new mill and the compressor plant at the Mine.

The electrical sub-station installed in the new Mill is replete with all modern appliances; there has been individual motor drive installed in all advisable places and a temporary disablement of any one of these motors will in no wise affect the working of any other part of the new mill.

Mine.

With an extraordinarily dry season and heavy demands for compressed air in the erection of the numerous tanks at the New Mill, the mine was deprived of much valuable power in the prosecution of the development work. Miners had to be employed for the quarrying of rock for the foundations at the new Mill, and pipe-men and engineers for the installation of drinking water and fire lines and sundry other things connected with the new Mill construction. The consequence was that the regular mining force was somewhat depleted and the postponement of valuable development and exploration work was unavoidable. Notwithstanding all of this, the Mine responded splendidly to all the demands made upon it, and the physical condition as depicted in the Mine Superintendent's report shows a very healthy situation. The southern section of your property—which is still practically virgin and undeveloped—undoubtedly holds much in store for your future work, and the exploration work now being carried ahead is expected to disclose ore bodies that will add materially to the life of your enterprise and the profits of future years. Surface indications and ancient workings to the north also hold out strong possibilities of mineral deposits in that portion of the property, and the long cross-cut under way is unquestionably warranted by the promising indications that have been discovered.

In every way the Mine is equipped with every facility for rapid and economical extraction of ore and development of unexplored territories. The two electric haulage systems—one on the lower 650 level for delivering the ore to the Mill, the other on the Upper 150 level for the handling of supplies, removal of waste and

tramming of ore from on and above that level to the main ore chute—afford a very efficient, expeditious and economical method of tramming.

The recent strike at the Mine had its effect not only in the curtailment of work in the Mine itself, but in the complete cessation of milling operations for several weeks. The strike was settled in a complete victory for the Company, and since the middle of October a full force of labor has been available.

The writer has permitted himself to dwell thus extensively on the conditions existing in Honduras, in view of his having spent almost three months of the past year at your property and during which time he was the active head of your operations for a given period.

You are thoroughly familiar with the organization of the office and work here in New York and, therefore, it is needless to dwell thereon. Suffice it to say that the requirements of the Mine are promptly and carefully taken care of, and continuous thought is being given to improvement, both at this end and at the Mine, that will tend to economize in administration and operation and at the same time keep this office fully informed of exactly what is being done at your property more than 2,500 miles away. This is exemplified by the new cost sheets that were prepared and which will have been inaugurated in the beginning of the operations of your new fiscal year as of October 1, 1912.

The completion of your New Mill, which precludes the probability of any extra heavy expenditures for a long time to come, the splendid actual physical condition of your Mine and the additional ore deposits your present work is bound to disclose, foretell a long era of prosperity in the future operation of your enterprise.

Respectfully submitted,

J. M. DeHART,
Secretary.

New York, December 1st, 1912.

To the President and Board of Directors,
The New York and Honduras Rosario Mining Co.
42 Broadway, New York City.

Gentlemen:

In view of the fact that your New Mill has been completed and is in successful operation, your attention is called to a resumé of some important facts as a result thereof.

In December, 1906, the year in which the writer first became familiar with your mines, there were 10,170 tons of ore "in sight," valued at $41.00 (U. S. C.) per ton, with silver at $0.68 per ounce. At that time there was very little, if any, low-grade ore developed, and, in fact, no interest was ever manifested in the latter, as no way could have been devised to treat it.

The above tonnage was sufficient to keep the reduction works in operation four to five months and the prospects for further ore supplies were not bright.

A vigorous policy of development resulted in the discovery of the wonderful Candelaria vein, and from time to time six other important ones have been encountered, namely: "Nueva," "Sphalerite," "Capitana," "San Miguel," "Concepción," and "Southwest," all of which are productive.

From 1906 to October 1, 1912, there have been mined and milled 202,000 tons, and there are reported by the Superintendent 352,716 developed, which will average $12.76 (U. S. C.) per ton on a basis of $0.50 per ounce of silver. Computed on $0.60 per ounce for silver, the average value per ton is $14.76.

Based on the operating costs for the last two months of the past and the first two months of the present fiscal year and the anticipated costs for a full year's work, there are safely $1,900,000 profit in the tonnage now developed in the mine. From the above figures it is obvious that the condition of the mine has been improved beyond all expectations in the past six years.

Equally interesting and more marked have been the reductions in the total costs per ton of ore treated during the same period, as shown by the following table:

	Total cost per ton.		Avg. Value of ore treated.	
1905-06	44.51	pesos	$40.00	(U. S. Cur.)
1906-07	42.20	"	40.00	"
1907-08	36.65	"	30.00	"
1908-09	36.09	"	27.00	"
1909-10	36.05	"	26.00	"
1910-11	37.05	"	28.00	"
1911-12	34.86	"	27.00	"
1912 July	29.00	"		
August	25.00	"	16.00	"
September ...	24.77	"		
October	24.41	"	18.75	"
November ...	26.19	"	17.37	"

The total figures for 1911-1912 include nine months' running with the old plant and three with the new works. Those for July, August and September are the total costs of operating under the new system, and they show a marked decrease from previous years. The old costs of 1905-1906 are nearly cut in half, and when the New Mill is fully under way it is expected that the total cost per ton will not exceed 20 pesos.

It is extremely interesting to also note that the New Mill handled during the last three months of the year 1911-1912 ore averaging $16.00 (U. S. C.) per ton, as against $40.00 (U. S. C.) six years ago; ore which at that time was considered as waste, and it is now being treated at a profit. This grade of ore could not even have been treated during the past year in the old plant, as the low extraction of the latter and the cost per ton overbalanced its total value.

Your attention is also called to the great improvement in the extraction percentage obtained in the new reduction works as compared with those of previous years, as follows:

Year.	Extraction percentage.	
1908-1909	87.65	
1909-1910	86.27	
1910-1911	83.71	
1911-1912	84.75	
1912—July		
August	90.00	estimated.
September		

Three years ago the writer is on record that if the contemplated improvements were made it would be possible to mine and treat $15.00 (U. S. C.) ore at a substantial profit, and you will see from the above figures this is practically being done, and by striving for further economy this successful end will be further bettered.

The past three years of construction work have been strenuous ones, in which time the ultimate goal has perhaps been lost sight of in the maze of details. And it is because of this last possibility that the above facts and figures have been called to your attention. In this way only can your Board of Directors see the results of their work, and the Stockholders appreciate the vast improvement in their property.

Respectfully submitted,

F. H. MINARD.

REPORT

OF

NEW YORK & HONDURAS ROSARIO MINING COMPANY

1913

NEW YORK, JANUARY 1st, 1914

OFFICERS 1913-1914

W. S. VALENTINE, *President.*
LEWIS L. CLARKE, *Vice-President.*
SIDNEY ABENHEIM, *2nd. Vice-President.*
ERNEST SCHERNIKOW, *Treasurer.*
J. M. DeHART, *Secretary.*

BOARD OF DIRECTORS 1913-1914

SIDNEY ABENHEIM,
H. H. BABCOCK,
LEWIS L. CLARKE,
I. HEIDELSHEIMER,
J. C. F. JACOBY,
M. F. SOTO,
AMBROSE G. TODD,
W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1913-1914

LEWIS L. CLARKE, *Chairman.*
SIDNEY ABENHEIM,
H. H. BABCOCK,
J. C. F. JACOBY,
AMBROSE G. TODD.

Report of the Board of Directors of the New York & Honduras Rosario Mining Company.

New York, January 1st, 1914.

To the Stockholders:

In presenting the Annual Report for 1913, *the Board of Directors calls attention to the fact that, while bearing this date, it covers the past year, and three months of the preceding year, or a period of fifteen months; the stockholders will remember that at a special meeting called for that purpose, new By-Laws were adopted, wherein the fiscal year was changed so as to run co-ordinate with the calendar year, and the annual meeting changed from December to April. The attached reports, therefore, are treated as of two periods, i. e., October,* 1912, *to September,* 1913, *and October to December,* 1913.

The periods referred to have been of continual progression in all departments of your business, and the general scope thereof broadened in all directions, so that you are now beginning to feel the results of the improvements made during the past few years.

It is with extreme pleasure that we can report that the new mill, which has been a matter of much discussion, not only has proven itself satisfactory, but has shown a capacity far beyond anticipations, and is now running steadily with practically no troubles; it is a monument of strength and is a worthy successor to the old mill.

The Treasurer's report gives the detail of values produced, and the Manager's report the percentage of extraction and cost thereof.

Comparatively little construction has been done—in fact, it has only been the conclusion of minor matters left after the major work was finished. The entire works are now enclosed by a good stockade, thus keeping out all trespassers and reducing pilfering to a minimum. Several cottages for married employees have been added to our village.

Mine.

The Manager's report shows steady and continuous development in our virgin territory; we are gradually catching up in this work and are pleased to report that the most satisfactory results have been shown. It must be noted that a large part of the tonnage delivered to the mill has come from the stopes left standing for many years past, that were too low for milling in the old mill under the antiquated amalgamation process or even in the cyanide plant that was subsequently added to our old mill, but which yield a handsome profit in our modern reduction plant. This is another proof of the advisability of having erected the new mill.

The Mill.

Too much cannot be said of this structure. In our report of last year, we advised you of the completion of the work and that, although we had met with some setbacks, continuous study and attention was given to these and all have been overcome, so that we are now running without mechanical or metallurgical troubles.

We wish to repeat here the statement made in our 1911 *report, that this Company is dropping the heaviest stamps ever used by any mining company on the American Continent. At the time of constructing our mill, this was looked at by some as rather daring and experimental—in fact, considerable skepticism was expressed as to the success thereof; the results speak for themselves.*

Geology and Petrography.

This important part of our work has continued without interruption, under the able supervision of V. F. Marsters, Esq. His investigations and explanations have given us much valuable advance information of our virgin territory, thus giving a perfect guide to our mine staff in determining the development work. We have on file most excellent microscopic-photographic slides of this work.

Financial.

Attention is called to the Treasurer's report, which shows the economic status upon closing of our books. The highly satisfactory condition of same is to be noted.

Accounting.

By instructions of the Board of Directors, orders were issued to your General Agent on April 26th and May 5th, 1913, to forward to this office all books of account, original vouchers, and documents of every kind for the years 1909-1910, 1910-1911, 1911-1912. By courtesy of our Second Vice-President, Mr. S. Abenheim, Mr. Max Tahl, who has been a confidential representative of Mr. Abenheim for many years, was engaged to audit same, and we are pleased to advise that after a most careful examination, Mr. Tahl's report, dated January 22nd, 1914, shows that he found everything satisfactory. So careful was Mr. Tahl's work that the Board of Directors further imposed on the Vice-President's courtesy to the extent that we were able to arrange with Mr. Tahl to go to the mine for a further examination on the ground. Mr. Tahl will leave at the end of this month.

Management.

Mr. Louis F. Valentine, the General Agent, was granted leave of absence on September 27th last, and Mr. A. R. Gordon, the Mine-Superintendent, was appointed Manager, and Mr. Max. F. Soto, Local Secretary.

Under the usual order of things, and to keep in closer touch with the works, your Board of Directors instructed the Secretary, Mr. Jos. M. DeHart, to visit the property. Mr. DeHart is now making preparations for his trip and will leave the fifth of this month.

Director's Visit.

Mr. H. Hobart Babcock, our Co-Director, has kindly volunteered to visit the works, as representative of the Board. This offer was accepted with deep appreciation, and Mr. Babcock will accompany the Secretary.

Staff.

All the departments of our works are under the superintendency of competent men, all of whom, with their assistants, are doing most excellent work. The best of cheer and co-operation exist amongst the staff; thus your work is well safeguarded. We tender our fullest appreciation to our representatives and employees for their faithful work.

Political.

The country has had a political quietus during the past year, under the honorable and capable direction of the existing Government. We are pleased to state that we have had the fullest co-operation of the heads of the Government in all matters that required assistance or advice.

Respectfully submitted,

W. S. VALENTINE,
President.

San Juancito, Honduras, October 1, 1913.

To the President,
New York, N. Y.

Dear Sir:

We submit herewith the following report of the work performed on the Company's property during the fiscal year of 1912-1913:

Management.

Due to death in the family, Mr. L. F. Valentine, the General Agent, absented himself from Honduras in September, 1913, and the writer was appointed Manager and Mr. Maximilian F. Soto, Local Secretary. This sudden change did not affect the work, and the business continued uninterruptedly. Most hearty cooperation exists among the employees and all are aiming toward the best interests of the Company.

Mine.

The mine being the basis of your enterprise its present condition and future possibilities deserve primary consideration. The following discussions under the various headings, are brief when the extent of the mine is taken into account:

Ore Reserves.

The Summary of Ore Reserves presented is based on calculations and estimates. The calculated reserves are shown on the accompanying maps, supplemented by a detailed ore reserve sheet for each vein.

While we have endeavored to calculate the reserves and show same on the maps wherever possible, there are some veins where this could not be done, due to the inaccessibility of their respective workings. There being sufficient evidence to show that ore which can be treated at a good profit in the present reduction works exists, we have made an estimate both as to tonnage and value. Nearly all of the estimated ore is in sections of the mine worked at a time when a small daily tonnage and much higher grade of ore was required, and since we have taken $11.40 as the basis of ore which can now be treated at a good profit, there is every reason to believe that such old sections of the mine contain the quantity of ore shown in the estimates. In the estimates is included ore worth as low as $7.00 per ton, but wherever this

appears, the cost of mining is taken into consideration, since as, for example, in the Rosario vein, where the ground is soft and the vein is in places as wide as 10 feet, mining is so cheap that as good a profit can be made on $7.00 ore as on $20.00 or $25.00 material in a narrow and hard vein like the Catalina. A calculation has been made of ore reserves existing in the Candelaria vein, but due to the very extensive stoping which this vein has undergone and the number of pillars and old stopes remaining, the calculated figures do not give a true result; therefore, we have made an estimate as to the quantity of ore still existing in this vein and include same under "Estimated Ore Reserves." A reduction in value per ton has also been made in the Southwest, Capitana and Colonia veins.

The percentage of waste has been raised, as, since the advent of machine mining, the stopes have to be run slightly wider.

Particular attention is called to the reserves of the San Joaquin, all of which were disclosed during the past four months.

We also draw attention to the existence of 16,825 tons of ore broken, valued at $12.00 per ton, and stored in the stopes, on which all mining expenses, except tramming, have been paid. This is a new departure resulting from a change in stoping methods, and is a reserve which has never existed previously.

Calculated Ore Reserves.

Tons Ore.	Percent Waste.	Tons Ore & Waste.	Total Value U.S.C.	Value at Mill, U.S.C.
76,593	63.7	125,396	$2,070,169.00	$16.51

Estimated Ore Reserves.

	208,000	$1,722,500.00	$8.28

Total Ore Reserves.

	Tons.	Value U.S.C.	Value per Ton, U.S.C.
Calculated ore	125,396	$2,070,169.00	$16.51
Estimated ore	208,000	1,722,500.00	8.28
Broken ore in stopes.	16,825	201,900.00	12.00
Total	350,221	$3,994,569.00	
Average value per ton.....			$11.40

Total Development, 1913.

	Headings.	Raises.	Shafts.	Totals.
	7,368	1,573	36	8,977.0
Cross-cuts				1,870.5
Total development				10,847.5 ft.
Old workings recovered				815.0 ft.
Total				11,662.5 ft.

Ore Production for Year 1912-1913.

	Cars.	Wet Tons.
Total	107,614	71,556
Less 8.6% (for moisture)		6,153
Dry tons delivered to mill		65,403
Average car capacity		.67 tons

Cost of Mining.

No. 1—Based on 82,228 Tons Broken.

		Per ft.	
Development	202,202.26	17.34	
Timbering for same	26,941.97	2.32	
Tramming for same	21,881.13	1.88	
	251,025.36	21.54	
Number of feet driven 11,662.5			
Cost of development per ton, based on 82,228 tons mined, is			3.05
		Per ton.	
Stoping	386,982.72	4.71	
Timbering for same	32,405.47	.39	
Tramming for same	51,774.01	.76	
	471,162.20	5.86	
Cost of stoping per ton, based on 82,228 tons mined is			5.86
The cost of other operations, exclusive of haulage and maintenance, is	168,422.03		1.93
Total mining costs, exclusive of haulage and maintenance			10.84

No. 2—Based on 65,403 Tons Delivered to Mill.

Labor	526,209.50	8.04
Supplies	258,683.16	3.96
	784,892.66	12.00
Add 16,825 tons ore broken in stopes at 10.84 per ton	182,383.00	
Total mining expenditure	967,275.66	

Comparison of Mining Costs.

No. 1.

	Based on number of tons mined previous year (39,258). Per ton.	Based on number of tons mined this year (82,228). Per ton.
Development	4.57	3.05
Stoping	9.41	5.86
Other cost, exclusive of haulage and maintenance	5.00	1.93
	18.98	10.84

No. 2.

Based on number of tons delivered to mill.

	Previous year, 39,258 tons. Per ton.	This year, 65,403 tons. Per ton.
Labor	13.13	8.04
Supplies	5.85	3.96
	18.98	12.00

NOTE: Values given, except where otherwise stated, are in Pesos. A Peso is equal to 43 cents U. S. currency.

The following is a brief discussion of the veins which have produced ore during the past year, also their future possibilities:

San Miguel Vein.

About 38 per cent. of the ore treated in the mill came from this vein and most of it from the territory south of the Capitana Junction.

The Upper 150 S. heading has intersected the West vein and the Upper 350 heading is within a few feet of it. No efforts have as yet been made to determine whether the San Miguel crosses the West, but this work is pending until the Upper 350 heading also reaches this vein so that we can determine from what point it would be most advantageous to prosecute this work.

The Peña Blanca shaft, 120 feet deep, at the bottom of which the Zero level was cut, has produced and is still producing a considerable quantity of high grade ore. The territory opened up by the shaft has exceeded our expectations, and while much ore has already been removed, we look for even greater quantities in the future. There is every reason to believe that this ore-body will extend for at least 75 feet below the Zero level.

The Upper 550 level heading S. is furthest from the West vein and is being driven to determine the vertical extent of several ore bodies exposed at the Upper 350 level.

The Lower 300-foot drift which parallels all the upper workings has demonstrated that as a general rule the values do not extend down to this depth. The Lower 300 heading N. has been extended to the San Joaquin and has opened up several small pockets of milling ore, but their vertical extent cannot be even roughly estimated, since the same section of the vein at the Zero level is valueless.

The calculated and estimated ore reserves of this vein indicate that you can expect the same tonnage from it as during the past year. The most prolific source for development lies in the territory above the Upper 550 level, between the Capitana and the West veins, and if the present indications are a guide at all, we are of the opinion that important ore bodies will be opened up.

Capitana Vein.

In spite of the fact that nearly 7,000 tons came from this vein, we are able to show in its ore reserve a larger tonnage and a greater total gross value than at this time last year. This is due to the fact that although the vein is quite narrow, it can be successfully mined with a stoping drill, which has made a lot of ground, formerly considered too costly to mine, at once available.

The Zero level has penetrated the entire ore bearing territory of the Peña Blanca level, and while the vein is narrower, it is fully as high in value as in any of the upper workings. We are of the opinion that the values in this vein extend to a greater depth than they do in its neighbor, the San Miguel, and our aim is to open the territory below the Zero, and do this from the Lower 300 foot level, where the vein is exposed. The Capitana has been one of the best sources for high grade ore during the past year, and it is certain that a greater tonnage will be mined from it during the coming year than during the past.

Catalina Vein.

This vein is similar in character to the Capitana, only that its principal values exist in silver. The stoping drill having proved a complete success in a narrow vein like the Capitana, the same should be true of the Catalina, consequently, considerable preliminary work is now being done to prepare the old workings for extensive stoping.

Development at the Zero level did not prove as successful as we were led to believe. It showed that values existing in the floor of the Peña Blanca level do not extend down to this depth. We believe, however, that ore will be encountered not far above the Zero, and we propose to expose it by means of raises during the coming year.

Buena Ventura and Northwest Veins.

These two veins are similar in character, and in reality are the Rosario vein split in two. They were the mainstay of the mine for several years, and due to wider and softer veins being encountered, many sections which might have been worked even at that time at a profit, have been abandoned. While the ground is very hard and the vein narrow, it has been demonstrated in other similar veins that stoping can be done at a profit. Several places are now ready for stoping, and these two veins should become important producers during the latter part of the coming year. Both are very erratic in direction, often splitting into several stringers. We have found that on some of the levels below the Peña Blanca, former operators followed a stringer and left the main vein in the wall, this sometimes occurring for as much as 200 feet. During the past year we have done considerable development in locating such lost sections and are glad to say that some very rich ore pockets have been found; this is especially true in the Northwest vein. As all the old workings of these two veins have not been recovered, it is possible that when they eventually are, still further sources for this class of development will become available.

Colonia Vein.

The Colonia vein has been a small but steady producer for years and the ore mostly came from the upper levels. The end of any large quantities of ore above the Lower 100 Colonia Mine level is in sight, but there are still several pillars and old stopes in the upper workings which can be mined at a profit. The only development in this vein has been at the Lower 300 Rosario mine level, 110 feet below the Colonia mine workings, in a raise between them and the Lower 300. The vein has proved very narrow, but of sufficient value to be stoped, although the percentage of waste broken with the ore will necessarily be high. One of

the best sources for development lies below the Lower 300 foot level, and endeavors to open this during the coming year should be made.

Nueva Vein.

No development has been done in this vein during the year, but considerable of the caved ground has been caught up and some ore extracted. This vein carries very high values, but is very narrow, and the walls being very loose, cause much waste to come down with the ore. The best source for development lies ahead and above the present Lower 200 foot heading.

Culebra, North & Socorro Veins.

Neither development or stoping has been done in these three veins during the past year, therefore, conditions in each are the same. The haulage ways to them, which are through the Guadalupe, have all caved, but it is proposed to work these veins through another section of the mine, as soon as some of the development work there has reached their vicinity. Of the three, the Socorro holds out the best possibilities for stoping ore.

Concepción

The ore mined during the past year all came from the stopes working off the Peña Blanca level. The vein width has always been exceedingly erratic, considerable waste becoming mixed with the ore, greatly reducing the value. When the territory below the Peña Blanca ore body was reached through the Zero level, some ore was found, indicating that a portion of this ore body extends at least 110 feet, or as deep as the Zero level. Several hundred feet of the Peña Blanca level floor is in ore of very good width, therefore, an important ore body should be obtained, and it is now being further opened up by means of raises.

After considerable preliminary work, the old workings below the Zero and to which we will refer as the Lower 100 Concepción adit, have been discovered and opened up, and very recently driving began in the vein, in a southerly direction. As yet we are unable to say what the results of this development are likely to be, but we believe that since the Concepción ore bodies do not extend to as high an elevation as those of its adjacent vein, the San Miguel, it is just possible that they may, therefore, extend to a greater depth, and this is the theory which we are mainly going on in the Lower 100 adit development.

Southwest Vein.

This vein was discovered less than two years ago and very likely is an extension of the West vein, but with a change in direction. That it has produced nearly six thousand tons during the past year and we are able to calculate nearly ten thousand tons for the coming year, certainly speaks well for it. The territory in which it exists is large, both laterally and vertically. This time last year the only development in this vein consisted in the Peña Blanca heading and raises.

The Peña Blanca heading is now nearly 1,000 feet beyond the point where it was last year at this time; the Upper 250 and 350 levels have been cut, and several hundred feet of development done on each; they are connected with three raises. A prospect winze is being sunk below the Peña Blanca to determine the extent of the ore body, and we are pleased to say that the vein, if anything, is wider than it was at the level with equally rich values. At the Upper 250 level the heading S. W. went through a very good body of ore several hundred feet in extent and the Upper 350 level, which is not so far advanced to the S. W., is now apparently entering the same body. The raise started in Block 77 from the Peña Blanca is now well above the 250. It was commenced in the vein carrying practically no value, but within 50 feet a change occurred and it has continued in stoping ore since then.

The greatest difficulty to overcome in developing and stoping this vein, and which makes the work expensive, is the loose and dangerous character of the walls.

Investigation is being made to locate this vein at the surface at the same elevation as the Peña Blanca level on the west slope of the mountain in the Jucuara gulch. The distance between the present Peña Blanca heading and the other side of the mountain is roughly about 5,000 feet, and the intention is to start an adit on the western slope to connect. A survey has been made and in case the Southwest is not found, driving will begin in any vein having a general northeast direction. The intention is to do this work with air drills and 15,000 feet of pipe have already been received for this purpose. With the Peña Blanca level extending to the western slope of the mountain, several economic changes will be derived therefrom, of which an abundant quantity

of much needed mine timber is one of the principal. Although no thorough investigation has yet been made, there are possibilities that some of the water flowing down the western slope of the mountain can be conveyed through the Peña Blanca level to the eastern side, which might be of aid for power purposes in the dry season.

The Southwest vein is a new vein, and due to the extensive territory in which it occurs, it is in the first stage of development only, and if present indications are to be taken into consideration, important quantities of ore from it should be expected. It is not likely that the ore will have good width in the present rock formation, but so far the bodies have been quite extensive laterally, which make up for this in no small degree. The most economical way to develop the vast territory of this vein lying below the Peña Blanca level is through a shaft. The winze now being sunk is merely for prospecting purposes and later on a large central shaft will be sunk in the more solid foot-wall rock and the vein will be developed through it.

As the lower 650 West heading is being driven, it will ultimately penetrate the Southwest territory, thus all the shaft workings will be drained and there will be a new and more convenient outlet for both ore and waste.

San Joaquin Vein.

While this vein was discovered three years ago at the Peña Blanca and Upper 350 level, no ore was encountered in it, but when it was cut at the Zero level, the conditions were better and development was started in the East and West headings. Very good ore was found at the start, and it continued in each heading for about 75 to 100 feet. No great quantity, however, can be expected above the Zero, since the vein at Peña Blanca is badly broken up and outside of a few rich spots is practically barren. The fact that in this vein, like in the Concepción, the ore did not extend to as high an elevation as in the adjacent veins, was highly indicative that the downward extent of the ore body might be greater, and accordingly the Lower 300 San Miguel heading north was driven to intersect the vein. When the vein was cut at the Lower 300 the assumption proved to be correct, as at the point of intersection $30.00 ore was found. Driving was started to the east and west, and the entire distance driven, about 300 feet,

is in ore. The fact that the Zero and Lower 300 level development was begun six months ago and that we have been able to calculate more than 20,000 tons of milling ore valued at $328,000.00 gross, speaks very highly as to what can be expected from this vein in the future. The most satisfactory feature is that the values at the Lower 300 are as good and the vein, if anything, wider than at the Zero, while just the opposite is true of many of the other veins at this elevation. This indicates that we should expect important ore bodies below the Lower 300 foot level.

The Lower 650 West vein heading west (which, as mentioned under the heading of "Southwest," is being driven), will, before reaching the Southwest, cut the San Miguel. When this is accomplished, the plan is to drive in the San Miguel for the San Joaquin, and from this point develop its extent below the Lower 300 level.

The worst feature of the San Joaquin vein is that its walls are exceedingly loose, and the vein, not being over one foot wide, it means that when stoping is done, considerable waste will go with the ore. Due allowance has been made for this in the Ore Reserve Sheets, but even with this the whole can be mined and milled at a very good profit.

West Vein.

It will be remembered that an ore body nearly 1,000 feet in length was extracted above the 250 level. The Peña Blanca drift, which parallels the Upper workings, encountered no ore, but no attempt was made to determine the downward extent of the 250 ore body. During the past year a raise was driven from the Peña Blanca to the Upper 250 to locate this downward extent. While the vein near the 250 gave some good assays, no stoping ore has been encountered; however, the raise is mostly at the western extremity of the ore body; therefore, this is not an indication that no ore can be expected and more such raises will be driven at points further to the east or more in the center of the ore body.

Rosario.

This vein is the one on which the mine originally started, and it has produced continuously for many years.

During the past year considerable recovery work of the old

workings has been done and several thousand feet opened up. Old stopes and levels were encountered in the course of this work, containing extensive bodies of ore of good width, which can now be mined at a good profit. None of the ore found up to date has been very high grade, but due to very good width and soft character, material running as low as $6.00 to $7.00 per ton can be mined and milled at as good profit as some of the narrow veins occurring in the hard ground which are worth from five to six times that amount.

The opening up of the old New York mine existing in Blocks 13 to 20 inclusive, has met with exceptionally good success. Several thousand tons of ore of good width and value were encountered, and as the recovery work progresses there are indications that more may be found. For the last two months the section known as the New York mine has been producing at the rate of 30 tons per day, and as stoping is done by filled stope method, this means that from 50 to 60 are broken daily.

The drift at the Peña Blanca level in Blocks 44 to 36 inclusive, which was recovered and timbered more than a year ago, produced the bulk of the ore coming from this vein during the past year. The territory between the Peña Blanca and what is known as the Upper 200 foot level is now practically worked out. The recovery work in this section is now being confined to the Upper 200 level and above, and there are good indications that further old stopes and drifts will be encountered which can be worked at a good profit.

Recovering workings of an old vein like the Rosario is a long and painstaking operation; at best all that can be recovered is the level and some of the stopes still open. The cost of re-opening some stopes that have already caved, would, in most cases, be greater than the quantity of ore they would be likely to produce, so they are not being touched.

With regard to the ore reserves of this vein, all that can be done is to make an estimate, the same as last year. This is based principally on the grade of ore this vein produced in the past, the grade we are able to treat now, and what the old workings have disclosed up to the present. Certainly, it is reasonable to suppose that a vein which was the only producer for 20 years and at a time when at least a $40.00 milling grade had to be

maintained, should contain considerable quantities of $7.00 material, which with the vastly improved methods of mining and lower expenses all around can be treated at a good profit.

Candelaria.

As a high grade ore producer this vein is a thing of the past, and outside of the territory above the Upper 500 foot level and below the Lower 200 there are no other sources for development. An attempt was made to calculate ore reserves in this vein this year, but the result was so unsatisfactory and misleading that we have deemed it safer to disregard this altogether. During the past year the Candelaria produced over 10,000 tons, which places it second on the list, and the indications are that at least the same quantity can be obtained during the coming year. If working conditions permit, development will be started above the Upper 500 foot level during the coming year and also at the Lower 200 and below.

Stringers.

Under this heading are included all small branch veins leading off the main ones. No large quantity of ore can be expected from any single stringer, but collectively and worked at a time when the respective principal vein is also being worked, they are capable of producing an appreciable quantity of ore.

Cross-Cuts.

Peña Blanca Esperanza Cross-Cut.

Driving of this cross-cut has been continuous, and up to date three veins have been cut, of which two are of importance. Vein No. 3, the last one found, is the best one; it has a southerly direction, is over a foot in width and some very good assays have been obtained. The ground is too badly broken up for the vein to be of stoping importance, but there are reasons to believe that further to the south it will become more uniform, and if the vein extends into it stoping ore should be found.

Esperanza vein No. 2 has several hundred feet of work done on it, and were it not for the very loose ground and broken up character of the vein, it could be stoped at a profit. A raise will be run to determine if better values exist at a higher elevation.

Esperanza vein No. 1 has given some good assay results, but

the ground is so exceedingly hard and the vein split into stringers, that commercially it is valueless.

The Upper 700 Esperanza Cross-cut has also been driven continuously and has cut veins No. 1 and No. 2, which proved to be worthless. The cross-cut is being further continued to intersect vein No. 3.

The territory south and southwest of the Esperanza cross-cut is believed to be favorable for ore occurrences. Esperanza vein No. 3 is one which may turn out to be of great value, but as it has only been cut a month ago, its total development consists of less than 50 feet, and consequently as yet not much can be said as to its future possibilities. We will, however, say that something outside of the ordinary has been found, the importance of which should be demonstrated during the coming year.

Geology.

A study is being made of the rocks and minerals, both at the surface and underground, not only on the Company's zone, but outside of it. A Geologist, Mr. V. F. Marsters, has been engaged, all the necessary apparatus purchased and considerable headway has already been made. A systematic study of rocks, both those composing the volcanic capping as well as the underlying sedimentary formation, is being made, with the object of determining which type of rock is most prolific in ore deposition. All data is being plotted on surface and underground maps, both to the same scale; thus after the work is completed, if the surface map is superimposed upon the underground map, correlation between the surface and the underground rocks will become evident, thus giving, as might be said, an interior view of the mountain. Such data, when systematically compiled, will be of great value in projecting future development, and especially so from the economical standpoint. While considerable of this work has already been done, much still remains, but it should be concluded during the coming year.

Future Development.

In the past, and when practically all the development done was in the veins constituting what is known as the Rosario vein system, it was a comparatively easy matter to keep a more or less uniform ore reserve. As mentioned in the annual reports of the

past three years and in other correspondence, the sources for any large quantity of new ore in the Rosario vein system have been exhausted. Long cross-cuts through barren country rock had to be run, to look for new veins. Such cross-cut projects have proved very successful up to date, and it was by this means that the San Miguel, Capitana, Concepción, Southwest, and in fact all the important veins in the last five years have been found; but the fact must not be lost sight of that to drive a cross-cut, say 2,000 feet in length, takes a year or more, and while it may disclose very large quantities of ore, such as the Northwest cross-cut did when it penetrated the San Miguel and Capitana veins, there may be a period of a year or more that there is no material addition to the ore reserves. Hence to the layman, the mine would not present a very healthy condition at that time when compared for instance with a previous year, although actually just the reverse might be true.

The best sources for development as they appear at present lie in the Southwest territory, which includes the Southwest vein. Another good source for future development lies also to the south and southwest, but through the Peña Blanca-Esperanza cross-cut along Esperanza vein No. 3. Perhaps the best source for development (at least one which holds out very good possibilities for immediate returns) is the San Joaquin vein above and below the Lower 300 foot level. Endeavors are being made to open the ground below the Lower 300 by cutting the vein at the Lower 650, or Rosario, level. While all the work done at the Lower 300 level is very recent and the vein has just been cut, we feel safe in predicting that this development will expose bodies of ore which will make this vein a heavy and very important producer in the future.

Mine Economics.

Machine Drills.

From the standpoint of economics, the most important advance that has been made at the property since its existence has been the installation of the stoping drill, and when we say this, we do not even except the New Mill. The stoping drill has revolutionized mining methods; it would be impossible to supply the New Mill with ore by the old hand method of mining. There is not sufficient labor obtainable in the country, and even if there

was, the cost would become so high as to leave virtually no profit on the grade of ore which the mine is able to supply.

Stoping drills first began to work in the mine about 3½ years ago and since then the original equipment has been practically renewed and considerable added thereto.

The air compressors for the last six months have been running at full capacity and there were times where more air could have been used. It may be necessary to install another air compressor during the coming year, as there will be sufficient power for it during the wet season, which means that it can be used eight months of the year.

Electric Haulage.

The Peña Blanca locomotives have been used on both the day and night shifts and have performed a large amount of work. The rough usage that these machines have been able to withstand has been truly marvelous; they have given no trouble whatsoever.

The Lower 650, or Rosario, level electric haulage, completed at the beginning of last year, is a vast improvement over the old system. The entire length of haul, over 8,000 feet, has been changed from an 18-inch gauge, 25-lb. rail track, to 24-inch gauge, 35-lb. rail, making a safer and better roadbed. Several cut-offs have been made through solid rock which eliminated sharp curves and bad ground, thus cutting down the upkeep cost by no small figure. The two new locomotives have rendered very satisfactory service.

The electric haulage has been extended into the Rosario, Southwest, Esperanza, Guadalupe and Candelaria veins at the Peña Blanca level, and at the Lower 650, or Rosario, level the haulage has also been extended from ore chute 52 into the heading of the West vein, about 2,000 feet.

Hoist.

The hoist serving the Peña Blanca-San Miguel shaft has been rendering exceedingly good service, having handled a large quantity of ore and waste. When the shaft connects with the raise now being driven to meet it from the Lower 300 level, still more work will be thrown upon it. Should development in the Peña Blanca winze in the Southwest vein warrant the sinking of a main shaft in the foot-wall, a hoist will have to be installed there during the coming year.

Drill Sharpeners.

All the machine drills are now being sharpened by two compressed air drill sharpeners. When it is considered that the day's work for a good blacksmith and helper is from about 150 to 200 drills, and when it is realized the average number of drills sharpened daily is between 1,500 and 2,000, it can be seen what an advantage both in speed and economy these machines are.

Gravity Road.

The surface gravity road between the Lower 200 and 650 levels was considered a relic of the old days, but even in its dilapidated condition an average of from 40 to 50 tons per day have been run over it for the last three months. Its complete rebuilding, however, is imperative, and this will be done in the early part of the coming year.

Mine Timber.

Although mine timber has become scarce, a sufficient quantity has been obtainable without increase in price; the price of sawed timber for the mine, which is not so abundant, had to be increased from 35 to 40 pesos per thousand feet. After the Peña Blanca-Southwest drift has been connected with the Jucuara adit, and the saw-mill has been moved to the western slope of the range, an abundant quantity of both mine and sawed timber at lower rates for some time to come will be assured.

Cars.

Practically all the cars on the 16-inch gauge hand haulage are in a poor condition, and rather than go to any further expense in keeping them in repair, it will be advisable to replace most of them.

Reduction Works.

The tonnage treated, production of bullion, extraction and costs are given here below. Comparisons are made with the year 1911-1912 which are of interest.

	1912-1913.	1911-1912.
Dry tons crushed	65,403.82	39,258.15
Product, ozs. silver	1,453,227.20	1,387,077.86
Product, ozs. gold	9,674.71	6,739.42
Value silver at 50 cents, gold at $20.00	$920,132.84 U.S.C.	$828,327.42 U.S.C.

The above product consisted of 319 bars of Doré Bullion and 949 boxes of Precipitates.

Extraction.

	Ag.	Au.	Total.
Battery assays	24.647	.16204	
Tailings assays	2.4286	.009691	
Per cent. actual extraction	88.221	89.634	88.237
Per cent. theoretical extraction	90.146	94.021	90.172
Per cent. by bullion and tails	97.86	95.44	97.85

Cost.

	1912-1913. New Mill.		1911-1912. New Mill 3 Months.	1911-1912. Old Mill 9 Months.	
	Pesos.	Per ton.	Per ton.	Pesos.	Per ton.
Labor	128,643.38	1.97	2.22	67,205.76	2.33
Supplies	364,536.90	5.57	5.28	193,996.96	6.72
Sorting plant & tramway				36,047.58	1.25
Total per ton cost		7.54	7.50		10.30
At 2.35=U.S.C.		$3.21	$3.19		$4.38

Mill.

While the Mill started operations in July, 1912, and all the machinery appeared to be in the best condition, certain mechanical defects began to become apparent which it has taken some time to remedy. Last March the trouble became more general and it was deemed advisable, while the machinery was still new, to call on the Allis-Chalmers Manufacturing Company, to set matters right. In September their representative completed the thorough overhauling of the principal mill machinery and left it in first-class condition. An inspection system has been inaugurated which promises that the mill should be kept in continuous working order, therefore, outside of minor troubles which occur in any plant, no serious setbacks should be encountered.

Although the mill was originally designed for a 200-ton per day basis, it has been demonstrated that it will take care of from 260 to 280 tons, and on certain classes of ore as high as 300 tons per day. Assuming the grade and character of the ore the same in all cases, a slightly better extraction of values can be obtained on the 200 ton basis than on one ranging from 260 to 290, as the lesser tonnage receives longer treatment in the system.

However, it has been demonstrated that it is decidedly more profitable to treat the greater tonnage of a lower grade ore than adhere to the 200-ton basis, and the plant has been adjusted accordingly.

In any new mechanical installation it soon becomes apparent that minor changes can always be made which will facilitate its operation, both from a mechanical and economical standpoint. The New Mill has been no exception to this and during the past year much has been done in this direction.

Surface and Administration Department.

Under this heading are embraced twenty-three different operations, as indicated by the cost sheets. These include the upkeep and maintenance of the entire property, such as roads, schools, police, hotels, repairs to buildings, etc.

COST.

	1912-1913.	Per ton.	1911-1912.	Per ton.
Labor	205,186.64	3.14	216,111.75	5.50
Supplies	24,520.95	.37	18,660.73	0.48
Total pesos	229,707.59	3.51	234,772.48	5.98
At 2.35% equals		1.50		2.54

During the year now beginning it may become advisable to entirely rebuild the Guadalupe Power Plant flume line, erect a new Engineering and Mine Office, and several dwellings. We may also be compelled to build a new market and police station at San Juancito, as the present ones are in a very dilapidated condition.

At present it is necessary to maintain the Tegucigalpa road as well as that to the Potrero Ramos Saw Mill, which is about 15 miles long. The idea for some time has been to extend the Saw Mill road and connect with one built by the Government, which leads to the Capital. One road would thus serve both purposes, and with the present one to Tegucigalpa discontinued, the maintenance cost for roads should ultimately be lower than at present. It is likely that the extension may penetrate sections which will give a fresh supply of much needed saw mill timber, and in that case it will not become necessary to extend several branch roads leading to the present saw mill site. No survey has as yet been made to determine the approximate cost of this work.

Recapitulation of Costs.

1912-1913.		1911-1912.
12.00 pesos per ton	Mine	18.98 pesos per ton
	Tramway	1.25 " " "
7.54 " " "	Mill	8.65 " " "
3.51 " " "	Surface and Administration	5.98 " " "
23.05 " " "		34.86 " " "
$9.81 U.S.C.		$14.83 U.S.C.

New Rosario Works.

While practically all the mill construction was completed when the new year began, considerable work still remained to be done in constructing dwellings, clubhouse and hotel, carpenter shop, stables, hospital, retaining walls, etc. The clubhouse and hotel is the finest building of its kind in the country and is completely equipped with all the necessaries to make life pleasant for the employees. Particular attention has been paid to make the dwelling houses, both for the single and married employees, as comfortable as circumstances permit.

In May the Laboratory burnt and was a total loss, covered by insurance. No serious inconvenience resulted and a new one was erected and equipped in a very short time.

Now that all the operations have been transferred to Rosario, many of the native employees in the mill and other departments who have their homes in San Juancito are compelled to walk to work. This makes our dependence upon them less certain, especially during bad weather. It is aimed to construct some three or four rows of dwellings to accommodate from 25 to 30 men and have such men as we depend upon live at the works. This will enable us to call upon them instantly in extraordinary cases, and they would obtain the quarters assigned to them only with this understanding.

Power Plants.

Both the San Juancito and Guadalupe Power Plants have been working at a high efficiency, and during the abundance of water continuously, therefore, the shut-downs due to accidents have been practically nil. Considerable trouble has been experienced with landslides on the Escobales and Aguacatal flumes, which serve the San Juancito plant, but as these occur in the rainy season, and as it is but rare that both flumes are damaged at the same time, either one is of sufficient capacity to supply the San Juancito plant with enough water to give all power needed in conjunction with that produced by the Guadalupe plant.

The Peña Blanca air compressors have been working at their usual excellent efficiency and have given no trouble, and for the past six months have been running at full capacity.

General.

Mine.

Although over 65,000 tons were milled during the past twelve months, the mine is in better condition than it was at this time last year. You now have two new veins which are very important, namely, the Southwest and San Joaquin. The Southwest has more than come up to all expectations, and since it exists in extensive territory, it can be predicted that it will continue to be an important producer for some time to come. The San Joaquin, as was mentioned before, has just been struck at the Lower 300 foot level, and that we have been able to calculate over 20,000 tons of ore and waste in so short a time, augurs well for its future possibilities. One of its important features is that it carries values as deep as the Lower 300 foot level.

While the ore reserves this year are slightly lower than last year, this signifies nothing, because as was explained under "New Future Development," a good deal of work has to be done in barren ground for long periods, during which naturally no ore is being encountered.

Mill.

All the mill machinery is now in good condition and it has been demonstrated that approximately 8,000 tons per month can be treated. This fact greatly facilitates matters in the mine, as it permits the utilization of low grade ores which were not considered profitable before. There may be periods when the mill capacity will have to be cut down and these will occur when extensive repairs are required in the mine or the mill and during the dry season. However, granting all this, you may look for a materially greater average daily tonnage for the coming year than during the year just closed.

Expenses.

The most important economical change during the past year has been the adoption of the filled stope method of mining the ore. For the last four months, during which the method has been extended throughout the mine, the records show that from 350 to 400 tons per day have been broken, at a total cost of perhaps 20 per cent. more than a year and a half ago, when only 100 tons per day were being produced. Of course, at that

time the grade of ore was much higher than at present, but so far as the breaking of the ground and tramming are concerned, the value of the ore has usually nothing to do with it. This is a point that is not often realized, but which nevertheless is true. Assuming normal working conditions on the property during the coming year, we can say that you can look for an appreciable decrease in your mining and milling costs, as figured on the dry tons crushed basis during the year beginning October 1st, 1913.

Of the entire mill crew, 25 to 30 per cent. is occupied above the crushing floor and in the ore bin. This is due to the difficulties caused in handling the very sticky ore with the present grizzly bar and crushing floor arrangement. It is proposed to change the construction of this section of the mill so as to make the conditions more adaptable for the economical handling of the ore; this should reduce the mill cost by no small amount.

Production.

This subject is ever uppermost in our minds. With the mine in better shape than at this time last year, the mill machinery troubles over, the New Rosario construction work practically completed and with expenses again approaching normal proportions, we feel we can say that you can look for better quarterly productions, therefore, for increased dividends, than you have obtained during the year which is just closed.

The writer and the entire staff wish to extend to you their thanks for the confidence which you have displayed in their endeavors and it will be their aim to merit same in the future.

Respectfully submitted,

A. R. GORDON,

Manager.

Supplement to Annual Report, Covering the Months of October, November and December, 1913.

San Juancito, Honduras, January 1st, 1914.

To the President,

New York, N. Y.

Dear Sir:

We submit herewith the following brief resumé of work done from October 1st to December 1st, 1913.

Mine.

Owing to the short period, no attempt has been made to calculate the ore reserves, but it is safe to say that 10,000 tons of ore, worth about $11.50 per ton, U. S. C., at the mill, have been found, which exist principally in the San Joaquin vein.

Our broken ore reserves in the stopes, which on October 1st was estimated at 16,825 tons, has been increased by 4,200 tons, thus bringing the total figure up to 21,000 tons.

Development distributed in drifts, cross-cuts and raises consisted of 4,027.5 feet.

The San Joaquin vein is coming up to all expectations and development is being pushed as rapidly as conditions will permit.

There are very good possibilities of opening up important orebodies in the immediate future at the Upper 350 and 550 San Miguel headings in the vicinity of the West vein.

Nothing can be said regarding other veins, since their respective developments have not yet reached their objective points.

The ore delivered to the mill consisted of 29,035 wet tons, which, when figured dry, was 26,200 tons, the difference of 2,835 tons being due to about 9 per cent. moisture.

Mill.

The following figures show the performance of the Reduction Works for the three months:

Tons treated in October	8,050
Tons treated in November	8,450
Tons treated in December	9,700
Total, dry tons	26,200

The resulting product consisted of:

Silver—460,410 ozs.
Gold— 3,411 ozs.
Value: Silver at .50, gold at $20.00...$295,797.00

The product was in the form of precipitates, consisting of 338 cases, weighing 31,520 dry pounds.

The December figures show what the mill can do in the way of tonnage. The machinery is in first class shape and is being so maintained. From time to time improvements become apparent, and these are made as required.

Mining Cost No. 1.

Based on 30,400 Tons Broken.

	Development.	Per foot.
No. of feet driven, 4,027.5.		
Development	63,301.88	15.72
Timbering for development	5,571.40	1.38
Tramming for development	5,641.10	1.40
Total, pesos	74,514.38	18.50

			Per ton.
The cost of development per ton, using 30,400 tons broken, is			2.45
	Stoping.	Per ton.	
Stoping	108,540.90	3.57	
Timbering for stoping	14,872.37	.49	
Tramming for stoping	19,926.93	.65	
Total, pesos	143,340.20	4.71	
The cost of stoping per ton, using 30,400 tons broken, is, pesos			4.71
The cost of other operations, exclusive of haulage and maintenance	51,916.34		1.71
Total			8.87

Mining Cost No. 2.

Based on 26,200 Tons Delivered to Mill.

	Mining (including Development).	Per ton.
Labor	170,422.58 Pesos	6.505 Pesos
Supplies	77,428.34	2.955
Total	247,850.92	9.460
Add increase of 4,200 tons broken ore in stopes at 9.50, carried as capital account	31,900.00	
	279,750.92	

Mill.

Labor	38,475.33 Pesos	1.469 Pesos
Supplies	104,725.85	3.997
	143,201.18	5.466

Administration.

		Per ton
Labor	60,796.24 Pesos	2.320 Pesos
Supplies	7,366.71	0.281
	68,162.95	2.601

Recapitulation of Costs.

	Oct. 1st to Dec. 31st, 1913.	Per ton.	Per ton. Oct. 1st, 1912, to Sept. 1st, 1913.
Mine	247,850.92	9.46	12.00 Pesos
Mill	143,201.18	5.47	7.54
Administration	68,162.95	2.60	3.51
Total	459,215.05	17.53	23.05

Reduction per ton treated during Oct. 1st to Dec. 31st, 1913 ..... 5.52 Pesos

Expenditures.

Mining Cost No. 1 shows the cost per ton of mining and development as based on 30,400 tons of broken ore, which is 26,200 tons treated, plus 4,200 tons of broken ore added to "Broken Ore in Stopes," on which all mining expenses except tramming and maintenance have been paid.

Mining Cost No. 2 also shows mining including development, but based on 26,200 tons delivered to the mill, as well as the cost on the same basis of the Mill and Administration Departments.

Although not a true comparison with the report ending September 30, 1913, as this embraced the year's work, while the present report covers only three months, the comparison made under the heading of "Recapitulation of Costs" is highly interesting, as it shows a material decrease in the operating costs as figured on the per ton basis.

Respectfully submitted,

A. R. GORDON,

Manager.

Report of the Treasurer of the New York & Honduras Rosario Mining Company.

New York, January 1, 1914.

To the President:

Gentlemen:

According to the new By-Laws adopted at the Stockholders' special meeting held for that purpose on November 5th, 1913, the fiscal year of the Company was changed to correspond with the calendar year. Therefore, all figures and statements in this report cover two periods, one of twelve months and one of three months, the former fiscal year running from October 1st to September 30th, the fiscal year of which this report treats continuing to December 31st.

The past year has witnessed the uninterrupted running of the New Mill, so that its capacity may now be said to be known. Originally constructed to treat 200 tons of ore daily, as high as 325 tons have been crushed in 24 hours, and without undue crowding, so that a quantity approximating 300 tons may be considered a normal daily product. During the past month of December the total tonnage treated was 9,700 tons, or a daily average of 313 tons.

For comparison only, we divide the result of the year into the two periods referred to:

From October 1st, 1912, to September 30th, 1913, there were treated in the mill 65,403 tons ore, yielding 1,453,227 ounces silver and 9,675 ounces gold, of a value of $1,051,273.28.

From October 1st to December 31st—26,200 tons; silver, 460,410 ounces; gold, 3,411 ounces, valued at $328,100.05, the totals for the two periods being: 91,603 tons crushed, yielding 1,913,637 ounces silver, 13,086 ounces gold, valued at $1,379,-373.33.

For details as to per ton cost of ore mined and treated you are referred to the Manager's report.

The President's report explains the engagement of Mr. Max Tahl, for the examination and auditing of the books and accounts of the Company, both in Honduras and New York.

The result of the New York audit is annexed hereto in the General Balance Sheets, Profit and Loss Accounts, Income Statements and a table showing the improvements at the mine for the period ending September 30th, 1913.

On December 31st, 1913, there was a net cash reserve of $291,000.00, a satisfactory figure, particularly since there are no extraordinary outlays, such as machinery or construction, in view.

With the extremely satisfactory physical condition of the mine and reduction works in Honduras, and the healthy financial condition of your Treasury here, the continuance of dividends on a more generous scale may be looked forward to.

Respectfully submitted,

ERNEST SCHERNIKOW,

Treasurer.

New York and Honduras Rosario Mining Company, New York.

General Balance per September 30th, 1913.

ASSETS.

Value of Mine, Real Estate and Concessions			1,500,000.00
Improvements on Property, Furniture and Tools in Honduras (Refer to page 41)			908,750.00
Bullion in Transit			268,453.88
Cash on Hand			11,299.81
Honduras Accounts Receivable			500.00
New York Office Furniture			1,800.00
Government of Honduras			18,908.41
R. Streber, Tegucigalpa			1,850.00
ASSETS IN SAN JUANCITO.			
Values under treatment and Ore in Mill-bin	43,113.67 Ps.	= $18,346.25	
Broken Ore in Stopes, 16,000 tons	160,000.00 "	64,000.00	
Honduras Cash & Cash Items	135,569.65 "	57,680.21	
" Inventory	441,158.24 "	187,735.42	
" Store	79,051.07 "	33,638.75	
Live Stock Account	10,960.92 "	4,664.22	
	869,853.55 "		
	At 237⅝%		366,064.85
			3,077,626.95

LIABILITIES.

Capital Stock Account	2,000,000.00	
Acceptances and Drafts	59,204.30	
Accounts Payable	20,578.36	
American Exchange Nat. Bank	40,000.00	
Surplus Account (see below)	957,844.29	
		3,077,626.95

SURPLUS ACCOUNT.

Balance Sept. 30th, 1912		912,367.41
Net profits for year ending Sept. 30, 1913	379,876.86	
Less Dividends paid	160,000.00	219,876.86
		1,132,244.27
Less written off for depreciation		174,399.98
		957,844.29

MAX TAHL, Accountant.

Income Statement for the Fiscal Year Ending September 30th, 1913.

INCOME.

Production of Silver and Gold for the year		$1,051,273.28	
Less Honduras Operating Cost	$660,313.52		
Less difference in exchange on Pesos	12,273.96		
	$648,039.56		
Freight to N. Y., Marine Ins., Assays and C. H. fees	11,000.63	659,040.19	
Net Profit from Bullion			$392,233.09
" " " Local Honduras Collections			1,509.98
Net Profit from River Tailings Operations			15,090.33
Net Profit from Cash Discount Account			3,029.14
Differences between ledger balances and inventory balances—			
Honduras Supplies			19,229.37
Honduras Store			906.11
			431,998.02

EXPENSES.

Differences in old accounts		$ 539.79	
Written off Live Stock, Pesos 1,217.88		518.25	
Written off Honduras Loan Account Pesos 9,078.77		3,775.95	
Written off Forest Timber Concession, Pesos 3,100.00		1,240.00	
Medical Treatment in N. Y. of Honduras Employees		250.00	
N. Y. Shipping Expenses (not charged on manifests		1,950.08	
N. Y. Administration expenses, viz.:			
Salaries	$31,555.80		
Expense Account	5,396.81		
Postage	400.37		
Cables and Telegrams	650.91		
Stationery	307.99		
Directors' Meetings	3,590.00		
Legal Fees	100.00		
Taxes	703.50		
Interest	1,141.71	43,847.09	52,121.16
Net Profits			$379,876.86
Dividends paid			160,000.00
Transferred to Surplus Account			$219,876.86

MAX TAHL, Accountant.

General Balance per December 31st, 1913.

ASSETS.

'Value of Mine, Real Estate and Concessions	$1,500,000.00
Improvements on Property, Furniture and Tools in Honduras	908,750.00
Bullion in Transit	207,438.23
Bills Prepaid	471.98
Cash on Hand	67,925.22
Honduras Accounts Receivable	345.00
New York Office Furniture	1,852.50
Government of Honduras 95,772.60 Pesos at 231%	41,460.00

ASSETS IN SAN JUANCITO.

Values under treatment and Ore in Millbin	13,868.63	ps.	$ 6,003.74
Broken Ore in Stopes, 21,000 tons.	191,900.00	"	83,073.59
Honduras Cash and Cash Items	89,953.62	"	38,940.96
" Inventory	482,083.00	"	208,693.94
" Store	96,498.73	"	41,774.34
Live Stock Account	10,613.77	"	4,594.71
Pesos	884,917.75		
At 231%			383,081.28
			$3,111,324.21

LIABILITIES.

Capital Stock Account	2,000,000.00	
Acceptances and Drafts	71,159.72	
Accounts Payable	183.73	
Surplus Account (see below)	1,019,980.76	
W. S. Valentine	20,000.00	
		$3,111,324.21

SURPLUS ACCOUNT

Balance Sept. 30, 1913		957,844.29
Net profits for 3 months ending Dec. 31, 1913	128,157.75	
Less Dividend paid	60,000.00	68,157.75
		1,026,002.04
Less written off for depreciation		6,021.28
		1,019,980.76

MAX TAHL, *Accountant.*

Income Statement for the Three Months Ending December 31st, 1913.

INCOME.

Production of Silver and Gold for the 3 mos...		328,100.05	
Less Honduras Operating Cost..	199,653.87		
Less difference in exchange on Pesos	2,305.77		
	197,348.10		
Freight to N. Y., Marine Ins. Assayer and C. H. Fees	4,091.61	201,439.71	
Net Profit from Bullion			126,660.34
Honduras Local Collections			251.90
Cash Discounts			840.22
Honduras Supplies (Differences between Ledger Values and Inventory)			11,266.21
Honduras Store Profits and Difference in Exchange..			1,570.55
Exchange on Loan to Government			2,551.59
Charge of J. T. Forth of Sept., 1913 (Charged to Honduras Supt. and included in Operating Cost) ..			204.15
			143,344.96

EXPENSES.

Old Fire Loss in Laboratory (paid for personal effects of Assayer).....	130.71	
Depreciation of Live Stock Acct. (less difference in Exchange)	37.45	
Cost of Geological Survey written off.....	530.34	
N. Y. Administration Expenses (See below)....	14,488.71	15,187.21
Net Profits		128.157.75
Dividend Paid		60,000.00
Transfer to Surplus Acct.		68,157.75

N. Y. ADMINISTRATION EXPENSES.

Salaries	11,088.87
Interest	94.44
Expenses	1,274.17
Postage	55.54
Cables and Telegrams	97.98
Stationery	247.71
Directors' Meetings	980.00
Legal Fees	650.00
	14,488.71

MAX TAHL, *Accountant.*

Improvements on Mine September 30th, 1913.

Reduction Works	$420,000.00
Power Plants	234,900.00
Walls, Fences, Pipes, Mains and Sewers	31,200.00
Appurtenances at Mine	30,000.00
Electric and Loco. Shops and Electric Haulage System	25,500.00
Old Mill Machinery	25,000.00
Precipitate and Bullion Refinery	19,400.00
Real Estate at Amapala and San Lorenzo	17,500.00
Employees' Quarters	16,300.00
Hotel and Club House	15,900.00
Machine and Blacksmith Shops	11,000.00
General Store House	10,900.00
General Offices	8,800.00
Water and Fire System	6,400.00
Dwelling Houses	6,200.00
Buildings at Old Mill	5,000.00
Furniture at Mine	5,000.00
Buildings at lower 200 level	4,200.00
Potrero Ramos Saw Mill	4,000.00
Laboratory	2,900.00
Carpenter Shop and Saw Mill	2,500.00
Hospital and Medical Department	2,350.00
Freighting Equipment	1,200.00
Stables	1,000.00
Surveyor's Implements	900.00
Surface Office Construction	700.00
	$908,750.00

MAX TAHL, *Accountant.*

Table Showing

Bullion Production.

1882	$ 2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1913—12 months	1,051,273.28
1913— 3 months	328,100.05
Total	$18,741,329.25

Dividends Paid.

1887	No. 1	$ 37,500— 2½%
1888	Nos. 2 to 5	60,000— 4 %
1889	Nos. 6 to 14	150,000—10 %
1891	Nos. 15 to 16	30,000— 2 %
1892	Nos. 17 to 21	165,000—11 %
1893	Nos. 22 to 25	150,000—10 %
1894	No. 26	37,500— 2½%
1896	Nos. 27 to 28	30,000— 2 %
1897	Nos. 29 to 40	180,000—12 %
1898	Nos. 41 to 48	120,000— 8 %
1899	Nos. 49 to 60	180,000—12 %
1900	Nos. 61 to 75	225,000—15 %
1901	Nos. 76 to 93	300,000—20 %
1902	Nos. 94 to 100	105,000— 7 %
1903	No. 101	15,000— 1 %
1904	Nos. 102 to 108	105,000— 7 %
1905	Nos. 109 to 121	180,000—12 %
1906	Nos. 122 to 139	285,000—19 %
1907	Nos. 140 to 153	210,000—14 %
1908	Nos. 154 to 165	180,000—12 %
1909	Nos. 166 to 173	120,000— 8 %
1910	Nos. 174 to 180	105,000— 7 %
1911	Nos. 181 to 182	90,000— 6 %
1912	No. 183	30,000— 2 %
1913	Nos. 184 to 188	220,000—11 %
Total		$3,310,000

Dividends 1 to 183 inclusive, on Capital Stock $1,500,000.00
Dividends 184 to 188 inclusive, on Capital Stock 2,000,000.00

Report of the Secretary of the New York & Honduras Rosario Mining Company.

New York, January 1, 1914.

To the President:

In the report submitted to you at the close of the fiscal year on September 30th, 1912, special reference was made to the almost insurmountable obstacles that were overcome in the construction of the New Mill. Stress was laid on the imperative necessity for the installation of such an elaborate and modern plant as, during the progress of the construction work, the Directors and Officers considered that the ability to treat the available ore reserves at a minimum cost and the general welfare of the Company demanded. During the fifteen months that have elapsed since the presentation of that report, the results from the operations of this New Mill and other modern mining equipment that was installed simultaneously with the construction thereof, as shown in the reports of the Manager, not only present a record that should be viewed with satisfaction by every Stockholder, but strongly emphasize the wisdom displayed in providing a plant of far greater capacity and with far more modern ore treating facilities than were called for by the plans that were first under consideration. The mechanical difficulties that were encountered during the first nine months of the period to which the present report relates were contingencies that only could develop after the plant was put in operation, and although these problems were extremely disquieting, the sending of a Mechanical Expert to the property and renewed efforts on the part of your Metallurgical and Mechanical Staffs resulted in these difficulties, which had made the attainment of fullest capacity and efficiency of the plant impossible, being entirely overcome. The tonnage for

October, November and December, and particularly the last mentioned month, show what is possible of accomplishment with the new installation when there are no interruptions; and when it is considered that 9,000 to 9,500 tons of ore can now be extracted from the mine and treated monthly with a comparatively small increase of labor over what it was necessary to employ when 3,000 tons of ore were treated monthly by the Old Mill, and particularly when your labor expense is approximately 60 per cent. of the monthly operating cost, the advantages accruing from modern machinery and intelligent location and installation are not difficult of discernment. An operating cost of $17.50 (silver), or at the present rate of exchange, $7.50 gold, per ton, which was the average operating cost for the last three months of 1913, is a glowing tribute to the success of the undertaking, since under present conditions, with increased milling capacity, it is possible to derive a larger net monthly profit from a grade of ore averaging $11.00 (gold) per ton than was realized from a grade of ore averaging $25.00 (gold) per ton during the last years of operation in the Old Mill. It is our opinion that the low water mark in operating expenses has not yet been reached, and we feel safe in predicting that, with the completion of the concentration of all departments that has been advocated, more gratifying figures will be realized in the year that is just dawning.

The undersigned, having received your instructions to visit the property on a trip of inspection and to take such action as he may consider necessary for the general good of the Company, and being in readiness to leave for Honduras on the 5th inst., will make this question of economy one of specific attention and which shall receive the very first consideration.

We are pleased to report to you that during the past year the mine has been kept fully supplied with all operating commodities, requisitions having received immediate attention, and it is our opinion that certain systems recently inaugurated in your New York office governing the purchase of the supplies will afford a much better control thereof and result in some economies. A new method of making but one general shipment each month to the mine instead of weekly shipments as formerly, will also, in view of the larger tonnage being dispatched at one time, enable

you to obtain lower freight rates with a consequent perceptible saving in freighting expense during the course of the year. The new system of accounting at this end, now being evolved with the assistance of Mr. Max Tahl, will also give a much more continual intelligent insight in the details of all monthly expenditures, both at San Juancito and New York, than has ever been possible heretofore under the old method.

With the mine in a physical condition equal to any that has ever been reported, the mill in shape to treat a tonnage for the year that has never been equaled, the organization in all branches of the business on the eve of attaining unprecedented administration and operating cost, and general harmony prevailing in every direction throughout the entire business, there is full justification for anticipating that the coming year will be the most profitable in the history of the Company.

Respectfully submitted,

JOSEPH M. DEHART, Secretary.

REPORT

OF

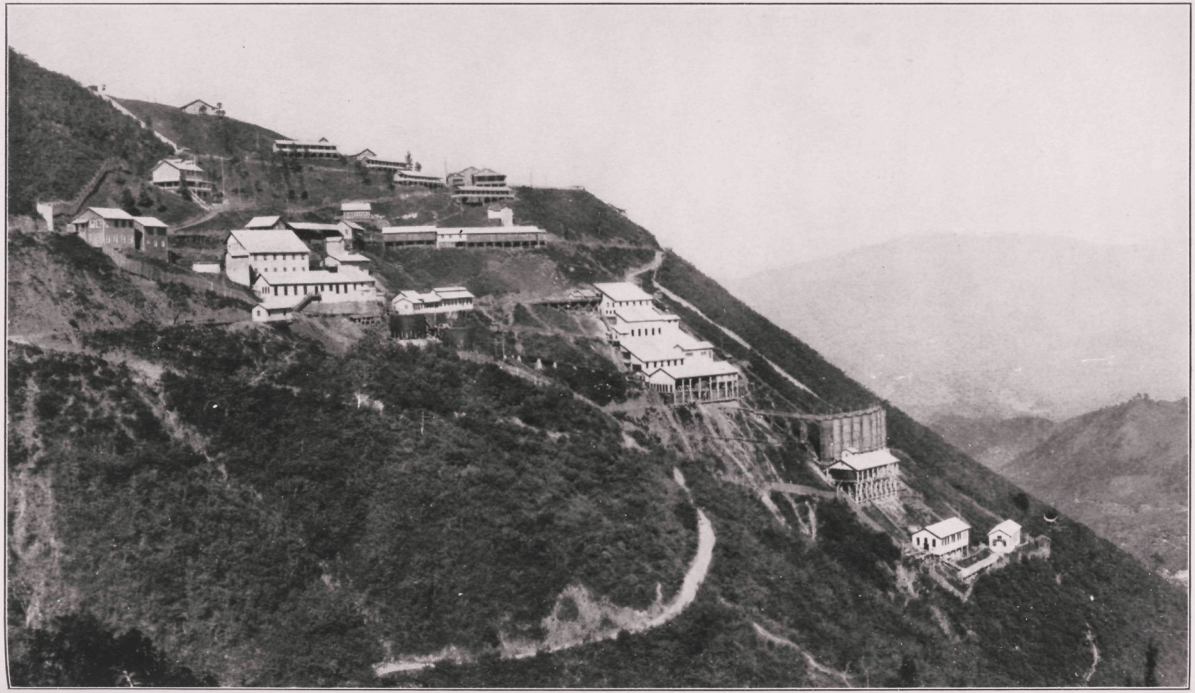
NEW YORK & HONDURAS ROSARIO MINING COMPANY

1914

NEW YORK, JANUARY 1st, 1915



Topographical View of Company's Properties: San Juancito, Honduras



General View of Reduction Works, Shops, Storehouses and Dwellings.

BOARD OF DIRECTORS 1915-1916

SIDNEY ABENHEIM,
H. H. BABCOCK,
LEWIS L. CLARKE,
I. HEIDELSHEIMER,
J. C. F. JACOBY,
M. F. SOTO,
AMBROSE G. TODD,
W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1915-1916

LEWIS L. CLARKE, *Chairman.*
SIDNEY ABENHEIM,
H. H. BABCOCK,
J. C. F. JACOBY,
AMBROSE G. TODD.

OFFICERS 1915-1916

W. S. VALENTINE, *President.*
SIDNEY ABENHEIM, *Vice-President.*
J. M. DEHART, *2nd Vice-President.*
ERNEST SCHERNIKOW, *Treasurer.*
M. F. SOTO, *Secretary.*

Report of the Board of Directors of the New York & Honduras Rosario Mining Company.

NEW YORK, Jan. 1, 1915.

To the Stockholders:

This, the thirty-fourth Annual Report, is laid before you by your Board of Directors, with the feeling that we have just cause for congratulation, notwithstanding that many factors have militated against an even better showing than the figures and statements accompanying this indicate.

The steady decline in the price of silver during the last half of the year just past, caused a shrinkage in the value of product equal to a dividend of almost three per cent.

The European war jeopardized the continuous running of your works, because the major part of the chemicals used in the metallurgical process was manufactured in one of the belligerent countries. However, we anticipated possible shortages by purchasing all supplies within reach of our local market, in San Francisco, and even as far away as Australia; and although obliged to pay extraordinarily high prices, we succeeded in obtaining sufficient of these chemicals to enable us to maintain steady operation. The Secretary's report will give further details hereon.

The past year has been one of continual progress in all parts of your enterprise. Many changes and improvements have been made, all tending toward the betterment of its physical status, and the permanency of its affairs.

The Mine.

Your special attention is called to that portion of the Manager's report covering this vital part of the business. The heaviest tonnage was extracted and delivered to the mill of any time in the history of the Company, more footage was driven in development, and there was a greater recovery of old ground than ever before.

On Jan. 1st, 1914, the estimated ore reserves consisted of

350,221 tons. During 1914 there were 109,170 tons delivered to the mill for treatment, notwithstanding which the year 1915 starts with an estimated ore reserve of 418,000 tons; but going deeper into the report on the physical condition of the various veins and geological prospects, we have before us a most hopeful condition, and one which speaks well for the future.

The Mill.

The Mill has worked almost continuously during the year. There were some minor interruptions, the principal cause of which was replacement of worn parts; yet the fact that it crushed and treated 109,170 tons speaks more for it than words can express.

The reports hereto attached describe the improvements during the year.

Geology and Petrography.

This work has been carried on continuously. Many notable and important discoveries have resulted, and there are on file in the office the reports of this branch of the work, which are too long for publication, but are open for study by our stockholders or their representatives.

Expansion.

Your Board of Directors has considered other properties with a view to acquiring same if found worthy, and certain options have been taken to the end that producing mines may be the heritage of our successors. A standing committee, known as the Expansion Committee, was appointed, consisting of Messrs. J. C. F. Jacoby, Chairman; P. R. Weiler, and H. H. Babcock, under whose direction this work has been done and will be continued.

Your staff in Honduras has made a preliminary study of various districts, and the reports on file show such excellent indications that orders were issued to establish prospecting camps, and active prospecting has now been started. This work will be continued and increased from time to time as discoveries warrant.

Financial.

The Treasurer's report herewith shows a satisfactory condition. Attention is called to the figures submitted.

Officers.

Several changes were made in the month of August last: Lewis L. Clarke, Esq., resigned as First Vice-President in order to create a vacancy so that Sidney Abenheim, Esq., then Second Vice-President, might be elected First Vice-President, and Joseph M. DeHart, Esq., then Secretary, be elected Second Vice-President, to take active charge of the office. Mr. Clarke retained his office as Chairman of the Executive Committee, and continued with the same interest and activity in the Company's affairs as before.

Max F. Soto, Esq., who had served as Local Secretary at the Mine, was recalled to New York, and elected Secretary of the Company.

Director's Visit.

The First Vice-President, Sidney Abenheim, Esq., kindly offered to visit the property of the Company officially on a tour of inspection. His offer was accepted, and he is now preparing to leave New York with Mr. Max Tahl on January 16th.

Management.

Your works have been efficiently managed by A. R. Gordon, Esq., E. M., assisted by a very competent staff. The great progress made, as shown by the accompanying reports, speaks for itself.

Honduras.

Honduras, under the statesmanlike leadership of the present Executive, Dr. F. Bertrand, has had an era of continued and notable progress in the development of its latent riches, and has co-operated with this Company in every way to the general benefit of all concerned.

Respectfully submitted,
W. S. VALENTINE,
President.

SAN JUANCITO, HONDURAS, January 1st, 1915.

TO THE PRESIDENT,
New York.

DEAR SIR:

We take pleasure in submitting for your consideration the following report, which treats of work done on the Company's properties in Honduras during the year 1914.

Although since the advent of the European war, an almost unprecedented low price of silver has prevailed, and there has been a considerable rise in the cost of some of the vital supplies, thus tending to increase operating costs, the year which has just closed was the most prosperous in the history of the Company.

General Statement.

The following statement treats of Production and Operating Costs during the past year, as well as with comparisons with the years 1912-1913:

Production.

	1914	1912-1913
Dry tons crushed	109,170	65,403
Ozs. Silver produced, as per Mine Assay	1,834,361	1,453,227
Ozs. Gold produced, as per Mine Assay	14,298	9,674
Extraction	.88662%	.88237%

Operating Costs.

	Total		Cost per Ton	
	1914	1912-13	1914	1912-13
	Pesos	Pesos	Pesos	Pesos
Mining	1,120,481	967,275	9.96	12.00
Milling	551,326	493,180	5.05	7.54
Administration	248,582	229,707	2.28	3.51
	1,920,389	1,690,162	17.29	23.05

(*A Peso is equal to* 41 *cents* (*U. S. Cy.*)—1914 *average.*)

We call your particular attention to the material reduction in costs in every branch of your enterprise during the year 1914, as compared with the year 1912-13, notwithstanding the appreciable increase in Mine development as described later on in this report.

Mine.

The mine being the nucleus of your enterprise, its performance during the past year, its ore reserves, and its future possibilities should prove of especial interest.

Ore Reserves.

We present for your careful consideration the following figures, showing ore reserves as existing in the mine on January 1st, 1915:

	Tons Ore	Total Value U. S. Cy.	Value at Mill U. S. Cy.
Calculated ore reserves.....	128,478	$1,909,946	$14.87
Estimated ore reserves.....	182,500	1,575,500	8.63
Broken ore in stopes.....	23,000	230,000	10.00
Estimated ore in old stopes.....	85,000	665,000	7.82
Total ore reserves.....	418,978	$4,380,446	Avge. $10.45

In some cases it has been necessary to reduce the calculated value of the ore in some of the veins, as this was higher than actual working conditions show. The Estimated Reserves in the veins consist of ore whose value and extent it is impossible to calculate, but which observations conclusively prove exist.

A new feature included with the year's reserves is the estimated stope fillings in the West, Guadalupe, and Rosario veins. In former years, when a very high Battery Grade had to be maintained, very close sorting could not be resorted to. This resulted in a lot of rich fines becoming mixed with the waste that was then stored in empty stopes and a large quantity of this material can now be worked at a very good profit.

Ore Production.

The ore sent to the mill during 1914 came from 15 veins and 2 old stope fills, in the following proportions:

Vein	Tons
San Miguel	33,241
Candelaria	15,266
Rosario	11,830
Capitana	10,581
Colonia	5,557
Concepción	5,386
San Joaquin	5,239
Northwest	4,897
Buena Ventura	4,131
Southwest	4,120
Nueva	3,670
Esperanza	2,475
Socorro	216
Guadalupe	150
Catalina	89
Rosario—Old stope fill	1,920
West—Old stope fill	401
Total	109,170

Development.

The development during the year 1914 amounted to 15,700 ft. as against 11,662 ft. for the year 1912-13, and was distributed as follows:

Vein	Feet
San Miguel and Concepción	3,010.
Southwest	1,743.5
Candelaria	1,885.
Rosario	1,450.5
Capitana	785.
San Joaquin	3,395.5
Buena Ventura	668.5
Guadalupe	8.
Esperanza	692.5
Colonia	360.5
Northwest	228.
Nueva	839.
Socorro	91.
Cedros	149.
Catalina	93.5
San Vicente	94.
Culebra	1.5
West	205.
Total	15,701.0

The following is a brief discussion of each vein, under its corresponding heading:

San Miguel Vein.

This vein produced during the year 33,241 tons. The greatest quantity of this came from the southern section, at and above the Upper 350 and U. 550 levels. The South headings at the Upper 150, Upper 350 and Upper 550 levels have all penetrated the West vein, but due to heavy stoping operations in this section no serious effort has as yet been made to determine whether the San Miguel crosses the West vein. As it is expected that some time during the coming year conditions will be such which will permit the execution of this work, we believe that by this time next year something definite will be known as to what can be expected of the San Miguel south of the West vein. Ore which has been opened up and stoped at the Zero level has more than come up to all expectations as to quantity and grade. The driving of the Zero south heading has been stopped permanently as it has penetrated beyond the ore limits indicated at the Upper 150 and there are no further possibilities of ore by extending the heading into the West vein. During the past year a new level (the Lower 100) was started off the shaft and is now being driven under the large ore bodies stoped at the Zero. Good indications lead to the belief that the ore bodies existing at the Zero level will extend in depth very near to the Lower 100, thus another important stope can be expected.

The vein in the Lower 300 ft. level north of the shaft, which contains several pockets of milling ore, opened up more than a year ago, has not been stoped, but as soon as the proper connections are made to facilitate removal of the ore, stoping operations will commence which may prove that the pockets are of greater extent than there is at present reason to believe. The production of this vein during the past 15 months has more than come up to our expectations, and while the probabilities are that it will continue to be a heavy producer during the coming year, the fact must not be lost sight of that the vein from the standpoint of development of further ore bodies of important proportions is a thing of the past. Its two lateral extremes, namely, between the

Concepción and West veins have been reached in the zone of most prolific ore deposition, thus the only sources for future development remaining and which are virtually outside of this zone, are a small section of territory above the stopes of the 550 level and a small section below the Lower 100 ft. level.

A connection was made with the old surface workings at the U. 350 Heading North. As yet nothing has been done towards their recovery, but there are indications that some ore will be obtained.

Capitana Vein.

This vein was a very important producer for the past 12 months, yielding 10,581 dry tons of ore, most of which was higher in value than the average milling grade. Excepting one or two unimportant pockets, all of the ground between the Upper 150 and U. 350 levels east of the Northwest cross-cut has been stoped. The stopes at and above the Upper 350 level are large and well advanced, and there are good indications that they can be expected to extend still an appreciable distance above the U. 350. The ground opened up at the Zero level, east of the San Miguel vein, has come up to all expectations, the ore in the section now being stoped having proved just as rich as that which existed in the stopes of the Upper 150.

Development now consists in drifting at the Lower 100 ft. level east of the San Miguel to penetrate ground beneath the rich Zero stopes. While we look for considerable ore in this section, the probabilities are that it will not be as rich as that encountered at the Zero level, due to the fact that this vein, as well as practically all the others in this mine, decreases in value rapidly as depth is attained.

Catalina, Culebra, North and Socorro.

Conditions in these veins are virtually the same as they were 12 months ago. Each contains a small quantity of ore, in most cases of high grade. The veins, however, are located in sections of the mine where no work is being done at present, and to put the haulage ways and entrance levels in shape, for the sole purpose of removing the small amount of ore that each vein contains,

would in most cases probably leave no profit. Thus, while collectively they show an important quantity of good grade ore, it must be understood that the only means by which this can be made at all profitable is that they be worked when adjacent and larger veins are also worked.

Buena Ventura and Northwest Veins.

Considerable work has been done during the past year in recovering the old workings of these two veins. In each, sections were found where former operators left the main vein and drove on a stringer. By again picking up the vein some important ore was disclosed. As all the old workings of these two veins have as yet not been recovered, the possibilities are that further conditions as just cited may be encountered and consequently more ore opened up. The Northwest during the past 12 months produced 4,897 dry tons, and Buena Ventura 4,131 dry tons.

Colonia Vein.

This vein has been a regular and important producer of good grade ore since the connection was made between the Rosario and Colonia mines in the spring of 1908. The only development work done during the past year consisted of drifting on the Lower 300 ft. level to the North. A very narrow but rich vein was exposed which should be worked at a profit. At the Upper 100 Colonia level considerable stoping was done, and that to the extreme south has demonstrated that the vein, which here swerves to the Southwest, contains stoping values, thus leading to the probability that considerable ore can be expected in this section. In the early part of the year some of the Colonia stopes connected with the ancient surface workings, showing that more ore was stoped from the surface than was at first suspected. The possibilities for development, therefore, in the territory between the highest underground workings and the surface are poor. The development on the Lower 300 ft. level, however, has shown that there are sections of the vein which it would pay to develop below that level, and as soon as an opportune time arrives the plans are to develop them.

Nueva Vein.

There was some development work done in this vein at the Upper 150 level, but excepting one or two very small pockets, no ore of stoping importance was found. The workings at the Lower 200 and 300 ft. levels have been re-opened and ore stoped, which, for the 12 months, amounted to 3,670 dry tons. In the Lower 450, East heading, a vein of good width exists and the plans are to drive on it this year.

Concepcion.

An important ore body, which is the extension of that stoped so extensively at the Upper 150 ft. level, was opened up and stoped during the past year at the Zero level. There are one or two minor pockets of ore still remaining which will probably be removed this year.

The Lower 100 Concepción adit level was extended to the San Joaquín vein, but outside of a few high assays there are no further indications that ore might exist between it and the Zero. The plans are to drive a small raise in the best section of the vein and thereby determine whether the high assays now available are not indicative of an ore body of sufficient proportions to warrant stoping.

A tunnel was also driven to the north at the Lower 300 ft. level North of the San Joaquín vein, but this has failed to disclose stoping ore.

As regards the future of this vein, we wish to say that it has been practically all developed, and while in the course of time some additional small pockets of rich ore may be found, nothing of any large extent should be expected.

Southwest Vein.

The Southwest vein is in all probability the extension of the old West vein, but with a decided change in direction to the southwest. It was one of the best sources for high grade ore during the past 12 months, producing in that time 4,120 dry tons. The greatest amount of development was done at the Peña Blanca level in a southwesterly direction, and this has demonstrated that

the vein beyond Block 78 is badly broken up and valueless. The rich ore existing between the Upper 150 and Upper 350 levels has virtually all been stoped, and all that remains in this section is a body at the Upper 350 which is now being stoped.

The development which has had most satisfactory results in this vein is that in the shaft. After a number of setbacks, due to a large flow of water, the shaft was finally bottomed at a depth of 120 ft. below the Peña Blanca level and it has disclosed a strong vein of good width and value. The plans are to soon begin drifting to the Southwest and Northeast from the bottom of the shaft, and there is every reason to believe that this work will open up a very important body of high grade ore. A serious effort was made to locate this vein on the western slope of the mountain, but this met with no success and, from work which has been done, both underground and at the surface, it now looks very much as if the vein does not have the extent in a south-westerly direction which your staff was at first led to believe that it had. Two hundred and six feet were driven in the West vein in a westerly direction at the Lower 650 level, the object of this being to penetrate the Southwest vein, drain the territory between the Peña Blanca and Lower 650 levels of water and to develop the intervening ground. The driving of the Lower 650 San Joaquín cross-cut and its cutting of the San Joaquín vein made it evident, however, that the Southwest territory might be more cheaply entered through this section of the mine, thus work in the West vein has been discontinued for the present.

San Joaquin Vein.

Development of this vein during the past year consisted of 3,395½ feet, which represents the greatest footage made in one vein during the year. While at this time last year the only levels existing were the Upper 150, the Zero and the Lower 300, we are now able to report that three more have been cut, namely, the Lower 100, starting off the Lower 100 Concepción adit level, the Lower 200, started off a raise from the Lower 300 ft. level, and the Lower 650 level, which was entered by a cross-cut 565 ft. in length, begun at the Lower 650 Guadalupe West vein junction especially to cut the San Joaquín.

The Lower 300 ft. level drift has proved the most prolific in ore deposition, and it may be said that at least 60 per cent. of the drift, which is now over 1,000 ft. in length, contains ore of sufficient width and value to warrant stoping at a good profit. The vein to the east at the L. 300 pinched and became valueless in the early part of the year and work was therefore discontinued, but there are indications which are sufficient to warrant further work in this direction at this level.

The Lower 300 ft. west heading was driven continuously throughout the year and while twice the vein pinched and became broken up, it was again found and attended with its usual width and stoping value. The vein was again intersected at the Lower 650 ft. level in the middle of November, and subsequent drifting has shown it to be of the same strength and width as at the Lower 300, but, excepting a rich pocket about 40 ft. in length, does not contain any stoping values. This L. 650 cross-cut penetrated the vein at almost the extreme eastern limits of the L. 300 ore body, so the fact that no particularly rich strike was made should not be looked on as a discouraging feature.

The Lower 650 heading West has a considerable distance to traverse under the ore body existing at the Lower 300, and while we do not believe, from the past history of the mine, that as rich an ore will be encountered as at the Lower 300, the possibilities of running into pockets of stoping ore at or not far above the Lower 650 are good. Before there can be any extensive stoping of this vein, adequate preparations must be made for the transportation of the ore to the Lower 650 electric haulage. To this end a raise has been started in the vein on the Lower 650 level, and when it has reached the Lower 300 Level, all the ore, not only from the Lower 300, but from all the other upper levels as well, can be trammed to this raise at low cost.

One bad feature of this vein is the soft and loose character of its walls which may be the cause of a considerable amount of waste being mixed with the ore. For this reason a generous allowance for waste has been made in the ore reserves which has

naturally brought the value per ton considerably below what the average assay values would show. We have deemed this advisable, however, until actual stoping conditions shall demonstrate that perhaps the ground is not as bad as present indications lead us to believe, and that, therefore, the ore can be produced with less waste.

Candelaria Vein.

Development during the past year was confined almost entirely to the lower levels and has opened up several important pockets of milling ore. The ground in which development was done and is likely to be done in the future is limited in extent so no large ore bodies can be expected.

West Vein.

With the exception of 206 ft. of drifting at the Lower 650 level in a westerly direction, the object of which was to enter the Southwest vein, there was no development on this vein during the past year. The recovery of old workings, with the idea of milling some of the old stope fillings, has had the serious attention of your staff, and we are pleased to state that it has met with considerable success. In the ore reserves we show an estimate of 50,000 tons of stope filling in this vein at $8.00 per ton, which we expect will be obtained between the Upper 250 and Upper 900 ft. levels. Due to the character of the vein and its surrounding walls the stopes, when the ore was mined, had to be filled with waste and the ore broken on top of this. Considering the fact that at the time this vein was a large producer the battery grade of the entire year averaged over 80 ozs. silver and .20 ozs. gold per ton, it is reasonable to suppose that in order to maintain this grade there could not have been very fine sorting in the stopes, thus a considerable portion of the fine rich sulphides have been left behind in the stope fillings, and in such a quantity as to make a large portion of the stope fills of a grade that will warrant milling at a good profit. As all development and mining charges have been paid, the only additional expense necessary to prepare this material for the mill is re-timbering of the workings in which it exists and its tramming to the mill. From this it will be seen

that material considerably lower in value than that which has to be broken from the solid vein can be handled at a profit, and during this year it will be our aim to take out as much of the stope fills as conditions will permit.

Rosario Vein.

This vein is so well known to you that it is needless for us to go into detail regarding it. We wish to say, however, that during the past year it has come up to all our expectations as to ore left in the pillars and ore to be obtained from the old stope fillings. Most of the old workings have been re-opened and from their appearance it is very probable that this year the Rosario vein will be even a greater producer than during the one just past. Fifteen thousand tons of stope filling, valued at $7.00 U. S. cy. per ton, have been estimated as existing in this vein.

During the past 12 months the Rosario vein produced 1,920 tons of fill and 11,830 tons of ore from the solid vein.

San Vicente Vein.

The San Vicente is one of the old veins which has not been worked for many years. A few months ago a cross-cut was started off the Upper 700 Socorro level to intersect it beneath some rich ground stoped at the Upper 900 ft. level. The vein has just been intersected by the cross-cut and indications point to an important body of ore.

Guadalupe Vein.

There was practically no development or stoping in this vein during the past 12 months. The workings are so extensive that when other veins in their vicinity are being worked it is probable that several pillars of ore will be stoped at the same time. The history of the Guadalupe is similar to that of the West vein; therefore, we have estimated 20,000 tons of stope filling at $8.00 per ton, on which a good profit should result.

Esperanza Vein No. 3.

This is one of the veins found over a year ago by the Upper 150 Esperanza cross-cut. Due to its convenient location to the ore chutes and main haulage ways, stoping was immediately started and during the past 12 months 2,476 dry tons were extracted. The vein is still producing and development is being continued to determine the vertical extent of the ore above the present stopes. There are probabilities that ore will be found below the Upper 150 level and if found perhaps the best and cheapest means by which it could be developed and removed would be through a shaft.

Los Cedros Prospect.

This prospect consists of extensive ancient surface workings located in the San Vicente gulch, the vein having an approximately East and West direction paralleling the San Vicente and being located about 350 feet north of it. A drift was run in a westerly direction, commencing at the most westerly end of one of the old stopes and has opened up a pocket of very high grade ore, the vertical extent of which has not yet been determined. There is also evidence which leads to the belief that this vein exists at the Lower 100 Concepción level and efforts will be made this year to develop it from this point.

Jucuara Vein.

This vein was discovered a short time ago. It has very nearly an east and west direction and exists in badly faulted territory about 75 feet east of what is supposed to be the Southwest vein in Block 84. The vein is of exceptionally good width, in places being 8 feet wide. One hundred feet of drifting has exposed a vein which will average well over 4 feet in width and a raise 70 feet in height shows equal width and better value. As the vein is in badly faulted territory, there is always danger that it may

become cut off or dwindle down to a narrow stringer upon entering other rock formation. Should more uniform ground be reached, however, it should maintain its present width and value for an appreciable distance. Although the vein was found only a short time ago, sufficient ore has been exposed to enable us to calculate 11,281 tons at $16.42 U. S. C. per ton.

Stringers.

In the course of time numerous small stringers leading off the main veins have been encountered which at the time of discovery were too narrow to be worked at a profit or, as is more probable, the ore in the main vein being more abundant, just as rich and decidedly easier to mine, they were left unexplored. As the principal veins are now being re-worked, these stringers will be encountered in due time and what ore they contain should then be removed at a good profit.

Cross-Cuts.

Peña Blanca-Esperanza Cross-Cut.

Of the three veins intersected by this cross-cut, Esperanza No. 3 is the only one which has produced ore during the past year.

Vein No. 1, while containing good values, proved too narrow and its surrounding rock too hard to be of stoping importance.

Vein No. 2 has also shown indications of ore, but the supposition is that the cross-cut has penetrated the vein at too great depth and consequently development is now in progress to determine whether at a higher elevation better ore exists.

Outside Candelaria Cross-Cut.

A cross-cut was started off the Upper 150 Candelaria E. heading in Block 30 to intersect what are known as the "Outside Candelaria Surface Workings." These workings are supposed to have produced a considerable quantity of high grade ore and the object is to reopen them and also develop the vein from inside of the mine.

Future Development.

Year by year development becomes concentrated to fewer sources. Those remaining, however, are of sufficient extent to warrant serious investigation for some time to come. Development to the Southwest, while it has been disappointing, so far as the Southwest vein itself is concerned, has been amply justified by the recent discovery of what is called the Jucuara vein. From 3,000 to 4,000 feet of territory to the southwest and west still remain before the western slope of the mountain is reached. There are surface indications of veins in this ground, and as development proceeds they should be intersected, if they exist at depth.

The largest undeveloped territory lies to the south, and is now being systematically entered through the Upper 150 Esperanza cross-cut, along what is known as the San Antonio vein, which has a general southerly direction and from which occasionally good assays are obtained. As was mentioned last year under this heading, long cross-cuts must be run in searching for new veins, which takes time; so when considerable work has been done in any one direction without results, it should not be discouraging, since there is plenty of evidence to the contrary, as, for instance, the Northwest cross-cut which intersected the Capitana, San Miguel and Concepción veins, the collective gross production of which can be reckoned in millions. In speaking of future development, the subject can only be treated in a most general manner. There is some ground remaining towards nearly all the points of the compass, which still has possibilities, and this is being investigated as the working conditions demand.

Mine Economics.

Haulage.

The two electric locomotives at Peña Blanca and the two at the L. 650 Rosario level rendered excellent service throughout the year. Towards the latter part of the year the addition of a third locomotive became necessary at the L. 650 level and one of the old locomotives of 18-inch gauge was overhauled and reconstructed for 24-inch gauge and is now rendering good service. There have been material extensions of track not only to the elec-

tric haulage, but to the hand haulage as well, and both have been kept in proper condition to aid in making the transportation of ore and waste as rapid and cheap as possible.

The hoist serving the San Miguel shaft handled all the ore from the San Miguel, Capitana, San Joaquín and Concepción veins below the Peña Blanca level with facility. A hoist has just been installed at the Southwest shaft and this year will be called upon to do considerable work. Both hoists are run by compressed air on the Peña Blanca level.

Drilling Equipment.

Throughout the year a larger number of machine rock drills, both on stoping and development, were operated than ever before, taxing the two compressors to their full capacity.

Stoping.

The filled stope method has been applied to all stoping operations throughout the year and has proved the most rapid and economical. As the native miners become accustomed to the new system a larger tonnage per man is obtained, which naturally has its direct result in lower cost.

Timber.

Suitable timber for mining purposes is becoming scarce in the sections from which it has been obtained at a reasonable price in the past. Some timber can always be obtained, but its cost might be such as to make the opening up of other timber lands preferable, even at an appreciable expense. The eastern slope of the mountains has been pretty thoroughly gone over, so the western and northwestern slopes should be opened up in the course of the next two years.

Mill.

Excepting the months during which a shortage of power prevails, the mill has been operating without interruption and at full capacity. The system of careful supervision and keeping of complete records of the life of the many wearing parts of the machinery inaugurated over a year ago has enabled the mill staff to foresee many mechanical difficulties and thereby prevent any serious interruption in the operation of the plant. Continuous

study is given to the metallurgical problems which constantly arise; thus a change in the character of the ore is at once noted and the proper adjustments made. A safer and more accurate method of calculating the extraction of values from the ore has been adopted. The uncertainty of the battery head has been eliminated, and it now serves only as a check against what is called the "mill head," which is derived from calculations in which the tailings losses, the dissolved losses and the bullion are taken as a basis.

In a way, the question which has had the most serious attention of your staff during the past year is that of crushing capacity. In strengthening the weak points and making general readjustments whenever necessary, the capacity of the various units has been equalized to such degree that during the year just closed 109,170 dry tons were treated, making the average daily crushing rate 299.1 dry tons as against 65,403 dry tons, or 179.2 dry tons per day for the year 1912-1913. The greatest tonnage put through the mill in any one month during the past year was 11,024 dry tons.

There are possibilities for still further improvements in this direction, and, provided no conditions arise which are beyond our control, we believe the average daily crushing capacity this year will be even greater.

The machinery added to the Mill during the year consisted of:

2 Compressors, 100 cubic feet free air per minute each (old and reconstructed).

1 Dorr Classifier (new).

1 Dorr Thickener and Storage Tank (in process of erection).

1 6x9 Aldrich Triplex Pump (new) at gold tanks.

1 set Grizzley Bars (new).

1 Dumping Tipple (new).

2 Wooden Tanks in connection with acid treatment of Merrill filter canvas.

1 Water Wheel and Centrifugal Pump to serve the two wooden tanks.

The proposed changes and installations for this year are:

4 Merrill Precipitation Presses and Automatic Zinc Feeders.

1 Hardinge or Ball Mill of about 40 tons daily capacity.

Construction of Waste Bin of about 50 tons capacity in conjunction with sorting arrangement at crushing floor.

Administration.

The administration cost during the year past, which embraces maintenance and up-keep of all the buildings, flume lines and roads, was Ps. 1.23 per ton less than during the year 1912-1913.

The new work during the year consisted of:

Reconstruction of former billiard room in the hotel and clubhouse into 12 rooms for employees' quarters, and the addition of four more for the same purpose on the second floor of the same building.

A suitable shed for the storage and protection of lumber, another one now being in process of construction.

A soldiers' barracks located across from the refinery, which now insures greater vigilance over this important building.

The Honduras store building located next the hospital.

The completion of the Mine Office at the Lower 200 ft. Level.

The fitting up of the Geologist's office in the basement of the Plantel office.

Motive Power.

Both the San Juancito and Guadalupe Power Plants operated at their usual efficiency and were called upon to furnish more power than ever before.

The total rainfall for the year 1914 was 40.55 inches, while for 1913 it was 74.55 inches. From this you will see that the past year has been an unusually dry one and several times obliged us to curtail power at the mine or mill for the lack of sufficient water.

The extension of the Guadalupe Power Plant or the location of another power site on the western slope of the mountains, or a means of conveying some of the water from the western slope

into the present power plants through the mine workings, is having the serious study of your staff. A survey for the Guadalupe plant extension to give an additional head of 496 feet has just been completed, but as yet no data is available as to the practicability of the idea.

The scheme of a power plant on the western slope of the mountain has possibilities, but as yet no data is available to determine whether the cost of installation would be anywhere within the limits that the conditions would permit.

Another proposition is one that would necessitate a cross-cut 2,800 feet long to be driven at the Peña Blanca level off the present Southwest vein heading to the Jucuara gulch. This tunnel, besides serving as a means of obtaining the water from the western slope, would simultaneously prospect the vicinity for veins and would open up a very large tract of mining timber which is becoming scarce on the eastern slope and which is commanding higher prices every year. This last scheme is thoroughly practical and cheapest, but it rests upon the quantity of water which will be available in the dry season, since in the wet the two present plants furnish more than sufficient power for all purposes. The plans are to take accurate measurements during the coming dry season and if the results thereof are such as to warrant the work, plans and specifications will be drawn up and submitted for your consideration and approval.

The Peña Blanca air compressors rendered excellent service throughout the whole year and at a marked low cost of upkeep. The demand for compressed air has been greater than the compressors were able to supply, and it became evident in the early part of the year that either the addition of another unit or the enlargement of the present machines would be highly desirable. The matter has had considerable study, both by you and your staff at San Juancito, and it has been mutually agreed that the most advantageous scheme would be to increase the capacity of the present two compressors by fitting larger air cylinders to each instead of adding another compressor. You have already placed an order for the necessary machinery, which it is expected to install this year, and when this is in place each compressor will have a capacity at full load of 2,120 cubic feet of free air, against 1,680 as at present.

Geology.

The systematic geological study of the Company's properties at San Juancito has been continued throughout the year, and it is now nearing conclusion.

Expansion.

The project of Expansion, the purpose of which is to gradually extend the Company's operations into other sections of the Republic, had its conception in the early part of the year and considerable has already been done in carrying it out.

The exclusive right to prospect and denounce in the Chile Mts., 10 miles to the east of San Juancito, and which embraces an area of about 1,200 sq. kilometers, was granted by the Government to the Company last September for a period of two years, with the privilege of renewal for an additional two years. Vigorous prospect work is now in progress. The Chile Mts. are known to contain many veins which it will be our object to locate and sample. Only when the vast territory embraced by the zone is considered can the scope of the work be realized.

General.

Government.

The Company has continued to enjoy the hearty co-operation of the Honduras Government. Its officials have stood ready to lend aid as far as it was within their power to do, the importance of which can only be realized when the multitudinous branches of your business are taken into account.

Mine.

Your mine, after a period of over 34 years' continuous operation, was, during the past year, called upon to produce a larger tonnage, yielding a larger amount of bullion than ever before. It has readily responded to the great demands made upon it, and is now in shape to continue doing this even at a greater rate this year.

With the great drain upon its ore sources, the necessity of locating new ore bodies is more important than ever before.

Development, therefore, is receiving the most serious attention of your staff, and it is believed that this year it will meet with the same degree of success that it has during the year just closed. Of course, the fact must never be lost sight of that every ton milled leaves just that much less in the mine and that, therefore, the inevitable end is bound to come some time. But the ore reserves as presented herewith show that no fears need be entertained on this score for some time to come, and when the time does arrive for Rosario to go the ways of all mines, perhaps by that time the active operation of the Expansion project, already on foot, will have produced a mine or mines which will continue the name of Rosario Company as the best producer in Honduras, if not in Central America.

Mill.

Many important problems have been solved during the year and some still remain; but this year, and under normal conditions, we look for even a greater tonnage being put through the mill than ever before. The mill, originally intended for 6,000 tons monthly capacity, has demonstrated that it can handle 11,000 tons in that period under normal conditions, and should it be deemed advisable to further increase this it can be done without resorting to any abnormal expenditures for additional equipment.

Production.

The question of production is naturally of paramount interest, and that it has been uppermost in the minds of your staff is evidenced by the fact that in spite of the low price of silver prevailing since the outbreak of the European war, the year which has just closed has been a banner one in the history of the Company.

In these unsettled and stormy times it is hard to predict very far into the future. But if economic conditions in general do not get worse either in Honduras or abroad and there is a turn for their improvement, we see no reason why this year should not be as prosperous or even more so than the one just past. The ore is in the Mine and the Mill in shape and ready to receive it and generally this is all that is required.

Labor.

Ordinary labor was more abundant during the year than for several years past, and we lay this to the almost total failure of crops, due to an exceptionally dry season and to the European war, which has caused the curtailment of some of the public and private undertakings.

Experienced underground labor is, however, always scarce, but with the advent of mining by machine drills is not felt as severely as in former times, when all mining operations were carried on by hand.

In order to keep the price of the staple article of food (corn) within reach of its native employees, large quantities of this have been and continue to be imported, and it is placed on the market at about cost, whenever the native product has a tendency to rise in price.

Visit of Officers of the Company.

Early last year we had the pleasure of a visit from a member of the Board of Directors, Mr. H. H. Babcock, Mr. J. M. DeHart, Secretary, and Mr. Max Tahl, Accountant, and every facility was afforded these gentlemen to get in intimate touch with every branch of the business.

Your manager took this opportunity to absent himself on a vacation, leaving Mr. DeHart, who at one time held the same position for several years, in charge. Several improvements were suggested and carried out which have aided in maintaining the business on an economical basis, and not alone this, the visit of the party has succeeded in bringing the members of your staff at San Juancito in closer touch with the directors and officers of the Company in New York, all of which can only result to the best advantage.

Your staff takes this opportunity to express its thanks for the hearty co-operation and support extended to it by you throughout the year and wishes to assure you that everything will be done tending to make the enterprise even a more successful one this year than it was during that just past.

Respectfully submitted,

A. R. GORDON,
Manager.

NEW YORK, Jan. 1st, 1915.

TO THE PRESIDENT:

In many respects the results of the year just passed are the most satisfactory in the history of the Company.

Briefly summarized, these results are: the largest tonnage treated by the mill, giving the largest production in ounces of silver and gold and value ever obtained, notwithstanding which the ore reserves are the largest, and, in the aggregate, the highest in value ever reported; the uninterrupted quarterly payments of 3 per cent. dividends; and better conditions in every branch of your enterprise, mine, mill and financial; all of which are described in detail in the accompanying reports and statements.

The total number of tons of ore treated during the year was 109,170, yielding as per smelter's returns, 1,834,913 ozs. silver and 14,273 ozs. gold, realizing $1,239,877.13. Had it not been for the decline in the price of silver from 58 cents per ounce at the beginning of the year to 48 cents per ounce at its close, the amount realized would have been considerably larger.

The General Balance Sheet and Income Statement show in detail the cash operations for the year. A table showing the value of fixed assets at the mine is also annexed hereto.

It is generally believed that with the termination of the European conflict, silver will materially rise in price, a circumstance much desired. And even though this rise should not occur, our physical and financial conditions should assure the continuance of regular dividends.

Respectfully submitted,

ERNEST SCHERNIKOW,

Treasurer.

Income Statement for Fiscal Year Ending December 31st, 1914.

INCOME.

Production of Silver and Gold		$1,239,877.13
Less Operating Cost in Honduras	$846,426.77	
Freight and Expenses on Bullion	23,519.65	869,946.42
Net Profit from Bullion		$369,930.71
Honduras Local Collections		1,268.98
Cash Discounts and Claims on Supplies		2,453.09
Honduras Inventory, Honduras Store and Commissariat (Differences between Ledger and Inventory)		10,696.78
Honduras Store Profits for Seven Months		759.42
		$385,108.98

EXPENSES.

New York Administration Expenses (see below)	$52,806.22	
Geological Examination	2,488.17	55,294.39
Net Profits		$329,814.59
Dividends Paid		240,000.00
Transfer to Surplus Account		$89,814.59

NEW YORK ADMINISTRATION EXPENSES.

Secretary's and Accountant's Trip to Honduras	$2,071.90
Shipping Expenses	643.10
Interest Account	1,547.37
Expense Account	5,689.55
Salary Account	35,305.66
Postage Account	263.86
Cables and Telegrams	381.95
Stationery Account	659.45
Directors' Meetings	4,018.00
Legal Fees	300.00
Taxes	1,925.38
	$52,806.22

New York & Honduras Rosario Mining Company.

General Balance, December 31st, 1914.

ASSETS.

Value of mine, real estate and concession	$1,500,000.00
Value of fixed assets in Honduras as per list	865,384.27
New York Office furniture	2,099.75
Bullion in transit	252,348.14
Cash on hand	19,300.13
Accounts receivable	5,020.91
Government of Honduras	38,309.04

ACTIVE ASSETS IN SAN JUANCITO.

Ore in mill bin	6,824.66
Broken ore in stopes	90,060.00
Honduras Cash and Cash Items	71,318.17
Honduras Inventory	230,928.84
Honduras Store	24,334.41
Honduras Commissariat	6,020.63
Live Stock	4,029.50
Supplies afloat	11,522.27
	$3,127,500.72

LIABILITIES.

Capital Stock	$2,000,000.00
Depletion Account	61,993.85
Supplies Payable	2,448.72
Drafts and Accounts Payable	68,690.23
Surplus Account	994,367.92
	$3,127,500.72

SURPLUS ACCOUNT.

Balance, January 1, 1914		$1,019,980.76
Net profits for year ending December 31, 1914	$329,814.59	
Less Dividends paid	240,000.00	89,814.59
		1,109,795.35
Less written off for depreciation	53,433.58	
Less written off for depletion	61,993.85	115,427.43
		$994,367.92

Value of Fixed Assets in Honduras.

Office and House Furniture at Mine	$9,153.17
Reduction Works	396,442.88
Power Plants	221,852.48
Walls, Fences, Mains and Sewers	29,445.00
Appurtenances	28,426.00
Electric and Locomotive Shops and Electric Haulage	24,065.00
Old Mill Machinery	22,367.89
Precipitate and Bullion Refinery	18,307.50
Real Estate at Amapala and San Lorenzo	16,515.00
Employees' Quarters	15,385.00
Hotel and Club House	15,005.00
Machine and Blacksmiths' Shops	10,079.00
General Store House	10,286.25
General Offices	8,305.00
Water and Fire System	6,040.00
Construction Account (uncompleted work)	869.56
Dwelling Houses	6,149.55
Buildings at San Juancito	4,536.00
Buildings at Mine Workings	4,953.26
Saw Mill at San Miguel	3,707.50
Hospital and Medical Department	2,217.50
Freighting Equipment	1,032.50
New Freighting Equipment	111.46
Stable	994.92
Surveyors' Implements	853.50
Plantel Office	660.00
Carpenters' Shop and Sawmill at New Rosario	2,360.00
Laboratory	3,481.43
New Honduras Store Building	1,781.92
	$865,384.27

Table Showing

Bullion Production.		Dividends Paid.		
1882	$ 2,452.27			
1883	12,900.42			
1884	149,741.39			
1885	244,444.70			
1886	224,157.58			
1887	613,446.05	1887 No. 1	$ 37,500—	2½%
1888	767,632.15	1888 Nos. 2 to 5	60,000—	4 %
1889	590,189.55	1889 Nos. 6 to 14	150,000—	10 %
1890	113.28			
1891	369,587.19	1891 Nos. 15 to 16	30,000—	2 %
1892	614,498.67	1892 Nos. 17 to 21	165,000—	11 %
1893	492,534.87	1893 Nos. 22 to 25	150,000—	10 %
1894	392,485.92	1894 No. 26	37,500—	2½%
1895	158,164.42			
1896	449,525.88	1896 Nos. 27 to 28	30,000—	2 %
1897	568,872.06	1897 Nos. 29 to 40	180,000—	12 %
1898	611,467.76	1898 Nos. 41 to 48	120,000—	8 %
1899	798,994.77	1899 Nos. 49 to 60	180,000—	12 %
1900	827,443.12	1900 Nos. 61 to 75	225,000—	15 %
1901	780,760.18	1901 Nos. 76 to 93	300,000—	20 %
1902	490,273.34	1902 Nos. 94 to 100	105,000—	7 %
1903	436,818.29	1903 No. 101	15,000—	1 %
1904	721,374.87	1904 Nos. 102 to 108	105,000—	7 %
1905	993,065.39	1905 Nos. 109 to 121	180,000—	12 %
1906	1,112,171.69	1906 Nos. 122 to 139	285,000—	19 %
1907	791,347.62	1907 Nos. 140 to 153	210,000—	14 %
1908	788,910.23	1908 Nos. 154 to 165	180,000—	12 %
1909—10 months	636,500.00	1909 Nos. 166 to 173	120,000—	8 %
1910	890,700.00	1910 Nos. 174 to 180	105,000—	7 %
1911	887,169.59	1911 Nos. 181 to 182	90,000—	6 %
1912	944,212.67	1912 No. 183	30,000—	1½%
1912-13—12 months	1,051,273.28	1913 Nos. 184 to 188	220,000—	11 %
1913—last 3 months	328,100.05			
1914	1,239,877.13	1914 Nos. 189 to 193	240,000—	12 %
Total	$19,981,206.38	Total	$3,550,000.	

Dividends 1 to 182 inclusive, on Capital Stock $1,500,000.00
Dividends 183 to 193 inclusive, on Capital Stock 2,000,000.00

New York, Jan. 1st, 1915.

To the President:

In the Secretary's report of January 1st, 1913, a prophecy was made that the year 1914 would be the most profitable in the history of the Company. In fulfilment of this, the results of the fiscal year just ended are not only a record, but in some instances they surpass our expectations. The reports annexed hereto show the total tonnage treated, the production, the operating costs, the footage made in development work, and the largest reserve in ore we ever had, and notwithstanding the difficulties which, due to the war, have arisen in connection with securing some of our vital supplies imported from Europe, we have been able to work continuously, and are now well provided with all operating commodities.

It became necessary, shortly after the beginning of the war, to pay very high prices for certain supplies, but it was considered wise to purchase in large quantities all such articles as had been imported from Europe, and which are essentially necessary in order to carry on our work. We were fortunate in this regard, and did not suffer any suspension of works, as our reports show; but while the danger of shortage now appears to be past, we are, nevertheless, closely watching the situation, and are keeping our stocks well supplied in advance. The question of the supply of cyanide of sodium is the most important, and has not as yet been entirely solved, but since the manufacture of this commodity has been begun in this country, we are less apprehensive in regard thereto.

All these facts speak for themselves, and show plainly the improvements effected and the efficiency of our organization.

Mr. J. M. DeHart, on his trip of inspection to the mines last year, gave most of his attention to the question of economy and introduced many improvements by which a better control of the expenditure was obtained, resulting in a perceptible saving.

A reorganization of the office and of the accounting system was also accomplished then, with the result that all accounts and statistical data are now quickly despatched to New York office each month, showing more clearly and more intelligently the costs of each operation.

We have experienced during the past year an extremely dry season, which to a certain extent hindered our works. The crop failure in the country made it necessary for the Company to import corn, flour, beans, etc.

Machinery for increasing the capacity of the compressor plant about 25 per cent. has been ordered, and it is expected that the same will be installed early this year.

Exhaustive studies are being made of the possibilities of increasing our power.

These improvements will enable us more rapidly to develop our vast virgin territory, and also permit of our operating on a more economical basis.

We believe that in view of the splendid physical condition of the mine, and the efficiency shown in all departments, the year 1915 will bring better results than ever before.

Respectfully submitted,

M. F. SOTO,
Secretary.

FREDERICK H. MINARD,
Mining Engineer.

NEW YORK, March 16, 1915.

TO THE PRESIDENT:

A new era in the history of the Rosario Company began about the middle of 1912, when the testing operations at the new milling plant were started. But it took many months to place the mine in the proper condition for maintaining the increased production and to adjust the new mill in order to achieve the best results therefrom. So really the end of the calendar year 1914 marks the close of the first full year's operations under the new and fully completed system of mining, ore treating and entirely new environments. Therefore, I am sure it will be of interest to your Directors to have a short statement as to the results obtained.

You will undoubtedly remember that just prior to and at the time the new plans were inaugurated the goal set was a production of not less than 200 tons per day at a cost not to exceed 20 pesos per ton, and the past year's work shows that this mark has been equalled and even bettered by the facts that the records show that a daily average of 299 tons were treated at an average cost of 17.59 pesos.

I wish to call your special attention to the fact that for many years no large quantity of ore in sight could be figured, and even up to as late a date as May 9th, 1908, there were only 5,300 tons with a gross value of $218,000, which could be actually termed "ore in sight," and this included 2,000 tons already broken in the stopes. At the close of the year 1914 the Manager reports a total developed tonnage of over 400,000 tons, with a gross value of over $4,000,000.

During the last two years the mine has been equipped with an excellent system of electric haulage and air drills have been substituted for doing a large portion of work formerly accomplished by hand labor.

The results from the new mill have been more than satisfactory, from the mere fact that it has treated 299 tons per day, which is nearly 50 per cent. more than its original rated capacity, and at a cost of 4.81 pesos per ton.

The above statement indicates that the mill accomplished more than was expected of it, at least in capacity, while the really vital and interesting information is whether it did this increased work expected of it efficiently and economically, and I think the few following figures will answer this most positively in the affirmative.

In almost every instance the amount of supplies per ton of ore treated shows a decrease, and the percentage of bullion in the precipitates shows an increase of 12.50 per cent.

As to consumption of power, the original estimates and specifications show the following requirements, based on 200 tons per day: Crushing, 12 H. P.; stamping, 90 H. P.; grinding, 225 H. P. The actual consumption of power for the past year for these same operations were 8 H. P., 92.4 H. P., 242.1 H. P.; but on a basis of 299 tons per day.

In fact, on page 31 of the writer's report to you on July 19th, 1910, it was estimated that a thoroughly modern mill, such as contemplated at that time, would require 1.6 H. P. per ton of ore treated, and the figures for the year 1914 show an actual consumption of 1.7 H. P. per ton. A record of various Crushing and Cyanide Plants throughout the world shows a consumption of 1.50 to 2.50 H. P. per ton.

It cost 4.81 pesos per ton to treat the ore, which was equivalent to $1.92 gold. Taking 18 crushing and cyaniding plants in America, which are comparable to our own, the average cost per ton of ore treated is $2.72.

Our two power plants have operated continuously for the year and they have done excellent service and are economical. They produced an average of 947.6 H. P. per day, at a cost of 49.77 pesos per H. P. year, which is equivalent to $19.90 per H. P. year, 5.45c. per H. P. day, or 0.227c. per H. P. hour. Considering the small quantity of power generated this is a very reasonable figure, and we could produce three times the power for practically the same cost. In fact, the lowest estimated cost for producing water power is $6.00 per H. P. year.

From the above concise statement I think you will appreciate the fact that the results we are now obtaining are more than satisfactory, and considering the inaccessibility of the property, and compared with properties doing similar work, I think we can claim "honorable mention" along with them.

The property is now in excellent condition, well equipped, and the future is most encouraging, and if I may be allowed to make a recommendation to the Board at this time, I would suggest that we devote all our energy to cutting down the cost of operations, increasing the percentage of extractions, and make a determined and vigorous development for new ore bodies, rather than try to increase the present output and milling capacity, and I believe there will be greater returns to the Company by adhering to such a policy.

Respectfully submitted,

F. H. MINARD,
Consulting Engineer.

REPORT

OF

NEW YORK & HONDURAS ROSARIO MINING COMPANY

1915

NEW YORK, JANUARY 1st, 1916

BOARD OF DIRECTORS 1916-1917

SIDNEY ABENHEIM, J. C. F. JACOBY,
H. H. BABCOCK, M. F. SOTO,
LEWIS L. CLARKE, AMBROSE G. TODD,
I. HEIDELSHEIMER, W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1916-1917

LEWIS L. CLARKE, *Chairman.*
SIDNEY ABENHEIM, J. C. F. JACOBY,
H. H. BABCOCK, AMBROSE G. TODD.

OFFICERS 1916-1917

W. S. VALENTINE, *President.*
SIDNEY ABENHEIM, *Vice-President.*
J. M. DEHART, *2nd Vice-President.*
ERNEST SCHERNIKOW, *Treasurer.*
M. F. SOTO, *Secretary.*
J. PERLMAN, *Asst. Secretary.*

Report of the Board of Directors of the New York & Honduras Rosario Mining Company.

NEW YORK, January 1, 1916.

To the Stockholders:

In presenting to you this, the Thirty-fifth Annual Report, showing the work done, progress made and the general condition of your property, we feel that in spite of various drawbacks that have been met during the year just passed, the situation is an encouraging one for the current year.

The decline in the market price of silver, which began in 1914, *continued during the past year to such an extent that many silver mines were compelled to shut down entirely. The price reached the very low figure of* 46¼c *in September last, being the lowest for many years. This decline made itself felt very materially in the sale of our product; nevertheless, your Board thinks that we may consider ourselves fortunate in having been able to declare* 12 *per cent. dividends and at the same time maintain a substantial cash reserve.*

During the last month of the year there was a turn in the price of silver, it having risen to over 50c *per ounce; it kept rising steadily and at the end of the year was quoted at* 55c. *The indications for a future advance are good and bullion dealers look rather optimistically into the future.*

The grasshopper invaded Honduras in the early months of the year, causing considerable damage by destroying crops and fodder; this not only caused a very heavy increase in our cost of freighting, but compelled us to ship large quantities of corn, beans, lard, etc., to Honduras, as prices on goods in the country had risen to almost prohibitive figures. All commodities shipped were sold to our employes at cost.

The European War continues to have its effect on the cost of supplies, some of which have increased many fold, and thus our per ton operating cost has been materially affected. Nevertheless, we have kept supplies well ahead of requirements and so avoided interruption in our works.

The Mine.

Attention is called to the reports of the General Agent and the Manager. These show that the greatest tonnage of ore in the history of the Company has been extracted and delivered to the mill.

In spite of this unprecedented tonnage demand, your Manager and Staff at all times were able to meet it and much credit should be given them for this.

Special attention is called to the work done in opening the large blocks of low grade ore, as also the extraction of fills from olden times, all of which, under most economical metallurgical work, have paid well.

With the heavy drafts on the mine, it was but natural that your staff devoted much time to the further investigation and development of the Company's virgin territory, and we are pleased to state, with very favorable results.

The Mill.

The mill has worked almost without interrruption, the only shut-downs being for lack of water power during the dry season, or for occasional repairs.

A number of additions were made to the mill with a view to increasing the tonnage and lowering the cost of reduction.

The fact that 117,790 *tons were crushed and treated during the year proves the mechanical and metallurgical possibilities and the good condition of this structure.*

The science of metallurgy is steadily progressing and each year brings further advances towards perfecting the economic extraction of higher percentages of metallic contents.

Your officers were instructed to make full experiments in order to ascertain whether our ore or tailings can be treated to advantage by the Oil Flotation Process, *and if it shall appear that any appreciable saving can be made by its use an experimental plant may be installed to try it out.*

Geology and Petrography.

This work has continued without interruption, and much valuable knowledge acquired.

The report of our geologist, V. F. Marsters, E.M., to the Manager, is on file in this office open for inspection. It is too voluminous to publish here.

Expansion.

In last year's Report the Board of Directors signalized its desire to leave a heritage to its successors by acquiring other worthy properties and prospecting same.

The high standing of your Company with the Government of Honduras merited a special recognition, and that Government granted you prospecting rights in a territory covering about 1,000 *square kilometers (over* 400 *square miles), known as the Chile Mountain. This lies about* 20 *miles directly east of your property.*

A force of prospectors was sent into this territory, and as will be seen in the Manager's Report, some favorable locations showing mineral deposition have been laid bare.

Financial.

The Treasurer's report herewith shows a very satisfactory condition.

New Stock.

Attention is called to the certificates of stock, showing the ownership of shares. These certificates were issued when the corporation was originally formed, and they were then all sufficient, but the changes that have taken place in the course of time make it advisable to have more modern certificates, properly engraved, which meet the standards of the New York Stock Exchange.

Your Board of Directors has ordered such new certificates to be issued. They will be for lots of 100 *shares and for fractional lots.*

Due notice will be given to the Stockholders so that they may exchange their present certificates for the new ones, without cost.

Transfer Agent.

By resolution of the Board of Directors, the United States Mortgage & Trust Company, 55 Cedar Street, New York City, has been appointed Transfer Agent of this Company. When notice is given for exchange of old for new certificates, the same must be presented at the office of that Company instead of, as heretofore, at this office.

This also applies to all future transfers of stock.

Management.

The business has been ably managed by A. R. Gordon, Esq., E. M. Manager, who has entire charge of all mining, milling and technical work.

Mr. A. G. Greeley, a man of long experience in Latin countries, is in charge of the administrative branch of the Company.

We have a most efficient staff, thus our interests are well safeguarded.

Official Visit.

In furtherance of established custom, your Second Vice-President, Mr. J. M. DeHart, was instructed to visit the Company's property on a general inspection, and to discuss matters of interest with your representatives. Mr. DeHart will sail for Honduras on January 27th.

Government.

In September last Dr. Francisco Bertrand was elected to the high office of President of Honduras, which he had held during a previous term, to take office on February 1, 1916.

Our relations with this gentleman have always been of the best, and we look forward to his co-operation to the fullest, which in itself is of great value to the future of the country as well as your Company.

Respectfully submitted,

W. S. VALENTINE,

President.

San Juancito, Honduras, January 1st, 1916.

To the President:

New York, N. Y.

Dear Sir:

We present the following resumé of work done on your property and its allied departments during the year of 1915:

Rosario Mine.

All points of interest pertaining to the mine are treated under separate sub-headings.

Ore Reserves.

The General Summary of Ore Reserves is given below. In all calculations pertaining to this subject silver is taken at 50 cents U. S. C. per oz. troy, gold at $20.00 U. S. C. per oz. troy; 13 cubic feet of ore in place constitutes one ton.

	Tons Ore	Total Value	Value at Mill Per Ton
Calculated ore	94,736	$1,318,798	$13.92
Estimated ore	104,500	869,500	8.32
Estimated stope fills	117,000	890,000	7.61
Broken ore in stopes at 21 cubic feet per ton	27,480	274,800	10.00
	343 716	$3,353,098	Av. $ 9.76

In making comparison with last year's reserve, which was 418,978 tons at $10.45 per ton, gross value $4,380,446, there is a reduction of 75,262 tons, $1,027,348 in gross value and a drop of 69c per ton. The quantity mined during the year 1915, however, amounted to 117,790 tons, which proved worth gross $1,329,342, or $11.29 per ton, showing that our calculations were made on a conservative basis.

As development and recovery of old workings proceeds during the year fresh data is obtained as to the ore resources of each vein. Therefore, at the conclusion of each year a general readjustment of the preceding year's reserve figures necessarily takes place and this is particularly true in the case of Estimated Reserves and Stope Fills.

This year's reserves have not been an exception to such readjustment. In some cases there has been a slight overestimate in tonnage and value or too great an allowance of waste percentage, while in others the reverse is true. In other cases the difference arises in the ore being removed from the Calculated and Estimated reserve and transferred to the Broken Ore in Stopes reserve.

Important progress has been made in locating and preparing for mining the stope fills of various veins. Although 85,000 tons were estimated on January 1st, 1915, and 23,508 tons mined up to January 1st, 1916, the reserve figures in this year's report show that 117,000 tons of $7.61 material can be expected.

The value of $7.61 per ton is low, but the very important point is that the cost of mining this fill material is so much less than of ore in place, that in many instances there is more profit in the fill than ore in place, worth two or even three times as much.

The average value of the ore is lower than ever before, but owing to increased milling capacity it is estimated that it will yield about the same profit as last year.

Ore Production.

The quantity of ore and stope fills sent to the mill is:

Total Vein Ore Production	94,170
Total Vein Fill Production	23,508
Grand Total Production	117,678

Development.

Development for the year just closed amounted to 13,000.5 feet, while in 1914 it was 15,701.0 feet, showing a decrease of 2,700.5 feet. Many hundred feet of caved ground have been recovered to get at ore pillars and stope fills which are not included under development, although in most instances it costs about as much per foot to do this class of work as driving in new ground.

The following is a brief discussion of each vein, under its respective heading:

San Miguel Vein.

This vein produced 16,690 tons, being the largest amount which came from any one vein during the year. The majority of this ore came from the territory next the West vein and above the Upper 550 ft. level.

The Lower 100 ft. level was extended under the ore body, which proved so extensive at the Zero level, and the ore found has more than come up to our expectations. The important ore bodies at the Upper 550, Upper 250 and Lower 100 levels as well as the appreciable broken ore in stopes reserve could easily make this vein the largest ore producer during 1916. But the best interests of the mine dictate that as much of this ore as possible be conserved and only the proportionate amount necessary stoped to help in bringing up to grade poorer material from other sources.

Capitana Vein.

Of the 13,000 odd tons of calculated and estimated ore reported as existing in this vein on January 1st, 1915, a little over 10,000 tons have been stoped during the year just closed. This year's reserves, however, show that nearly 9,000 tons of ore can be expected, which speaks very well for a vein considered about worked out. The drift at the Lower 100 ft. level has opened up ore, some of which is just as rich and of the same width as any obtained at the higher levels. A block extending to a depth of 50 ft. below the 100 ft. level has been included with the ore reserves.

What appears to be the Capitana vein was cut in the Lower 650 San Joaquin cross-cut, but upon assay gave no results.

Catalina and North Veins.

No work has been done in these veins during the year. Ore exists in each, which can only be stoped at a profit, when at the same time stoping operations are in progress in the larger veins in their respective vicinities. In the Catalina there is some territory above the Peña Blanca level which we believe warrants development.

Culebra Vein.

During the year just closed a shaft was started on what appears to be the extension of this vein below the Upper 500 ft. level and it is now 50 ft. in depth. Some good ore has been disclosed and further work is being done to determine its extent, which is probably rather limited.

Socorro Vein.

Machine stoping has been going on in this vein at the Upper 700 ft. level and the ore obtained has more than come up to every expectation.

Nueva Vein.

This vein produced 3,854 tons during the year, all of which came from a very narrow but rich vein. Some ore still remains and is now being stoped. Good stope fill is known to exist in this vein. A vein of good width exists in the Lower 450 east heading, which proved too low in value when the mine was worked on a 100 tons per day basis. As soon as other mining operations are started at this level, plans will be made to drive the heading referred to, and further develop the vein exposed.

Buena Ventura and Northwest Veins.

Practically all the old workings of these two veins have been opened up. While the Buena Ventura produced 4,715 tons of ore and the Northwest 3,319, there are many sections in each where a rich vein exists which it has been found is in places so narrow that it is doubtful whether it can be stoped at a profit. We have, therefore, considered it advisable for the present to slightly decrease the estimate in each of these veins, both as to tonnage and value, until further data is available as to just what can actually

be expected. If it has been necessary to lower the solid ore estimate this has more than been compensated by an estimate of 7,000 tons of stope fill in each vein and on the fill production sheet it will be noted that the Buena Ventura produced 3,507 tons of fill, and the Northwest 2,759, although no fill estimate was made on these veins in the reserve of January 1st, 1915.

Colonia Vein.

This vein produced 4,850 tons during the year. In inspecting the map of this vein you will note that the stope referred to is a continuous one for over 425 feet above the 100 ft. level.

Some good ore is known to exist in the floor of the Lower 300 ft. level, but, due to a very large amount of water, no effort has been made to sink a winze and thus determine its downward extent.

Concepcion Vein.

This vein is so closely allied with the San Miguel that ore reserves are reported jointly. Two thousand seven hundred and fifty-two tons of ore were produced. Development is being done at the Lower 100 ft. adit level to the Northwest on what may be the extension of this vein. Some ancient surface stopes have been encountered, which leads us to believe that perhaps ore which can be now worked at a profit will be found in their vicinity.

Southwest Vein.

All our efforts to locate the vein on the Peña Blanca level beyond Block 78 have so far met with no success and it appears to be evident that the vein just naturally dwindles down to a narrow stringer and eventually disappears. One possibility, however, still remains, and this is that the vein may exist north of the present drift, and it is planned to drive a small cross cut in that direction. The ore production amounted to 2,889 tons. Drifting is being done to the northeast and southwest at the Zero level, starting at the bottom of the winze Block 72 and at a depth of 100 ft. below Peña Blanca. Rich ore of good width has been almost continuous in these two drifts, the aggregate of which is 275 feet; therefore, an important body is expected in this section.

The existence of as rich ore at the Zero as at the Peña Blanca level augurs well for its downward extent below the Zero.

It is intended to also drive a rise at the Upper 350 level to explore the territory above the present stopes.

San Joaquin Vein.

Next to the San Miguel, the San Joaquin vein was the largest source of ore during the year 1915, producing 12,288 tons. Sufficient development has been done to enable us to eliminate the 10,000 tons of $9.00 per ton estimated ore as reported on January 1st, 1915, and include a more correct amount both as to tonnage and value among the calculated reserves of January 1st, 1916. This vein is being systematically developed between the Peña Blanca and Lower 650 levels, and it has been demonstrated in the year just closed that some of the ore can be expected to go as deep as within 50 ft. of the Lower 650 ft. level.

The development of the San Joaquin amounted to 2,977 feet, which is the greatest footage made during the year 1915 on any one vein, but owing to the fact that the vein is now pretty well opened up it is doubtful whether it will be as heavy during the coming year.

The only ore found in the 800 ft. of drifting at the Lower 650 level is a small pocket between Blocks 57 and 58. The evidence of ore at the Lower 500 ft. level, however, which is about 135 ft. above the L. 650, indicates that the ore certainly exists not far above the Lower 650.

Candelaria Vein.

This vein ranked third in the amount of tonnage produced, most of which came from the lower levels. Two thousand one hundred and eighty-five feet of development was done, a large proportion of which was at the Lower 200 ft. level, entered through the cross cut run from this vein from the Rosario vein in Block 37. Development is being done in the Lower 650 Guadalupe East heading with a view of penetrating the Candelaria vein.

This year 8,000 tons of stope fills are included with the reserves.

West Vein.

This vein, which was the mainstay of the mine for several years and finally became worked out, was again the scene of big mining activity during the year past. About three-fourths of the Upper 250 and Upper 350 levels have been completely retimbered and retracked and during the coming year will probably see the remainder of this work completed and similar work on the Upper 500 and 600 well started. This vein has been the source of our greatest fill tonnage during the year, producing 9,344 tons. The only reason that stope fill can be worked at a profit is because its mining is so cheap; therefore, no heavy expenditures can be incurred to keep the ground open.

Rosario Vein.

The Rosario vein was the fourth largest producer of ore during the year 1915, its output being 10,652 tons, practically all of which came from pillars of the old workings. Until further information is obtained regarding the vast old workings of this vein, it has been deemed advisable to somewhat decrease its estimated ore reserves.

Last year 15,000 tons of fill were estimated in this vein at $7.00. Three thousand seven hundred and ninety-three tons of this have been removed, and we estimate the same amount for the present reserves and consider it worth $7.50 per ton.

San Vicente Vein.

This vein was cut at the Upper 700 ft. level by a cross cut off the Socorro vein. Subsequent drifting on the vein disclosed sections which it will pay to stope.

Guadalupe Vein.

Only 407 tons of ore were mined during the year, but the fill production amounted to 4,105 tons. Some good ore pillars are known to exist in this vein, but, due to these being mostly along the main haulage ways, they are being left until some more opportune time.

The development consisted of 739 ft., practically all of which has been in the Peña Blanca East heading. Here and there spots of ore have been encountered, but nothing in sufficient quantity to warrant stoping.

The Guadalupe vein has been recently encountered in the Lower 500 W. drift of the Buena Ventura vein and drifting will be done to the east to get beneath several rich ore bodies stoped many years ago at the Lower 450 ft. level. Drifting has been going on for several months to the east at the Lower 650 ft. level and, while the vein is of good width, no stoping values have as yet been encountered. Although 20,000 tons of $8.00 fill were estimated for last year's reserve, of which slightly over 4,000 have been mined, this year's estimate consists of 25,000 tons of the same grade.

Esperanza Vein No. 3.

The production of this vein was 3,846 tons and a small block of ground still remains to be stoped. The Esperanza is one of the most erratic veins we have had to deal with during the year. The various levels and raises run would frequently disclose a vein of high value and good width, which, in many cases, upon being stoped, would pinch out completely or dwindle down to a very narrow stringer. A considerable amount of drifting was done at the Peña Blanca level, based not so much upon the vein showing as the desirability of exploring the Southwest territory towards which this vein has been striking. Several months ago, however, it was deemed advisable to discontinue following the vein, which had pinched to a stringer of not more than about 2 inches in width and driving a cross cut having a definite direction into the extensive Southwest territory. The surface showing more or less above this vein has an encouraging aspect; therefore it is planned to drive one or two cross cuts off the Esperanza drift to look for other veins.

Los Cedros Prospect.

A narrow but rich vein was opened up by development done on this prospect which exists in the San Vicente gulch and about 350 ft. north of the San Vicente vein workings. Development work was stopped when the heading ran into what appears to be the Crucero cross cut formation and into which the vein did not appear to penetrate.

Jucuara Vein.

The fears expressed in last year's report that this vein had possibilities of suddenly pinching out came true in the early part of the year; a raise driven from the Peña Blanca level in the very wide ore body suddenly ran into a seam filled with loose rock mixed with considerable talc. A few weeks later the same conditions obtained in the east heading at the Peña Blanca level. The winze being sunk from the Peña Blanca level and now about 50 ft. deep shows that a wide vein of stoping value still exists at this depth and from the rather meagre indications evident it would look as if it would continue to still greater depth. There are possibilities that this vein may come in again to the east of the present ore body; therefore, drifting at the Peña Blanca level will be done in that direction.

Although stoping commenced but recently, 508 tons have been sent to the mill, and it is probable that during the coming year an important amount of ore will be forthcoming from this vein.

Stringers.

Under this heading are embraced all small branch veins encountererd in various sections of the mine. Probably not enough ore exists in any one to warrant stoping alone, but when other work is being done in their vicinity what ore they contain can be stoped at a good profit.

Peña Blanca-Esperanza Cross Cut.

This cross cut is being driven at the Peña Blanca level and begins at the southeast extremity of Esperanza vein No. 3. Its purpose is to develop the extensive southern territory which it was first planned to enter through the Catalina vein workings. To explore the large southern territory by driving south, only east and west veins would be encountered, while exploring it from, say, some point at the surface and south of the mine workings, a more or less east and west direction would have to be taken, which would not take care of east and west veins. The most advantageous direction to explore the southern territory would, therefore, appear to be by a cross cut having a diagonal, that is, a

southwesterly direction, and inasmuch as the Esperanza workings are even further to the south than those of the Catalina and more advantageously located from every point of view, the cross cut was consequently started from that point.

Cross-Cuts.

Peña Blanca-Southwest Cross Cut.

This cross cut starts in Block 84 and at the junction of the Jucuara and Southwest vein drifts. Its purpose is three-fold: (a) exploration of the territory for veins, (b) additional water power for our plants, (c) a large supply of cheap mining timber.

Up to Block 87, the rock formation is similar to that in which the Jucuara and other veins exist, but from Blocks 87 to 95, the latter in which the heading is at present, about the same kind of rock was encountered as exists in the Crucero cross cut and of which very likely it is an extension. No ore-bearing veins in this formation are expected, but there are hopes that the cross cut will soon traverse through it and enter a territory more favorable for ore deposition. Assuming that no veins are encountered in the remaining 1,900 feet that this cross cut lacks to penetrate the Jucuara gulch, its driving will have been fully warranted even then, inasmuch as it will serve as an access for the development of some favorable territory which exists on the western slope of the mountain. After connection is made with the Jucuara gulch and the general outlook warrants it, it is planned to drive sub-cross cuts to the northwest and southeast.

Mine Economics.

Haulage.

The Peña Blanca and L. 650 electric haulages have been kept up to standard during the year and both were called upon to handle a larger amount of material than ever before.

The hoist serving the San Miguel winze and the smaller one at the Southwest winze rendered efficient service at very low cost.

Drilling Equipment.

The usual replacement of worn-out drilling equipment occurred during the past year. The new machines being adopted are of a more efficient type both as to drilling speed and lower air consumption.

Timber.

There were periods during the past year when some mining operations have had to be curtailed, due to the lack of timber. The woods on the eastern slope of the mountain have been pretty well stripped and during the last few months a good deal of timber has been coming from the western slope where, of course, it commands higher prices. When the Southwest cross cut penetrates the western side of the mountain, a large supply of timber will be available at lower prices than obtain at present.

Geology.

The study of the geology, both underground and at the surface, was carried on during the greater portion of the year and most of this data has been correlated on various maps. Even at the outset, when a mine is new, it becomes almost self-evident that a certain rock or group of rocks is more favorable to ore deposition than another. Such information, therefore, is given due weight when projecting development and often many feet of useless and expensive work is saved thereby. This is especially true when it is desired to develop territory where there are few or no surface vein exposures or where, if veins exist, they are covered over by a flow of rock of more recent origin. Our geologist's work has, therefore, had this particular point as a basis. Such data, inasmuch as it necessarily deals with much already developed and mostly worked out ground, is of little value in itself, but some knowledge of what the influences have been in causing mineralization of the veins already found is sometimes of considerable value when it is desired to develop new adjoining territory.

Having before them a proper geological map on which the position and extent of the various rock formations is more or less indicated, your staff is able to project the development along less general lines and in some instances save considerable money by eliminating useless driving.

A study is also being made of the geology of sections which cannot be reached through the mine workings.

Future Development.

The very large tonnage which is daily being taken out of the mine makes the finding of new ore sources more imperative than ever. Development, therefore, has had the most serious attention of your staff and neither time nor expense has been spared in doing work to enter the still quite extensive remaining territories where there are possibilities that veins can be expected.

The extensive territory south of the present workings contains some veins and stringers whose existence has been known for very many years and upon some of which surface work has been done off and on. The Esperanza cross cut or a sub cross cut off it should cut those that exist at depth.

The southwestern and western territory has so far produced the Jucuara vein, but subsequent work further to the southwest has proved disappointing, due to the encountering of what appears to be the Crucero cross cut formation in which no ore bearing veins have been found. There are some encouraging looking surface indications in the vicinity of the Jucuara gulch towards which the Southwest cross cut is being run and in the vicinity of which a wide vein containing what would now be termed "pay" ore is reported by one of your former consulting engineers, Mr. George Tyng, but which we have not been able to locate up to date. Attempts are, however, being made to trace various quartz boulders to their source, which may yet enable us to locate the vein referred to. Although there is little hope of finding ore bearing veins in the formation in which the Southwest cross cut is in at present, there are probabilities that more favorable ground exists further ahead.

It is our opinion that the possibilities of the San Miguel existing south of the West vein are good. Development will, therefore, be pushed with all speed and it should be sufficiently advanced by about this time next year to show whether or not this vein exists in the section indicated.

There is still some good ground remaining north of the present workings and some cross cutting is warranted ahead of the L. 650 workings and to the south of the Rosario vein on that level. Some of this work is planned during the coming year.

Reduction Works.

PRODUCTION.

	1915	1914
Total dry tons crushed	117,790.	109,170.
Average dry tons per day	322.7	299.1
Average silver per ton	16.97 ozs.	18.95 ozs.
Average gold per ton	.1400 ozs.	.1408 ozs.
Total ozs. silver gross contents	1,999,652.00	2,069,699.00
Total ozs. gold gross contents	16,475.6	15,374.9

RECOVERY.

Silver	87.45%	88.63%
Gold	92.32%	93.00%

MATERIALS USED PER TON.

Sodium Cyanide, 130%	3.930 lbs.	3.795 lbs.
Lead Acetate	.211 lbs.	.382 lbs.
Lime	35.5 lbs.	32.1 lbs.
Tube Mill Pebbles	3.58 lbs.	3.85 lbs.
Zinc Dust	.98 lbs.	1.16 lbs.

As the above table shows, a greater tonnage was crushed in 1915 than ever before. While the average per day was 322.7 dry tons, this includes the dry season period when the mill is shut down for several hours each day. The full capacity of the mill is at present from 355 to 365 tons per day and when the Ball Mill and Dorr Thickener Tank are installed, it is expected that from 380 to 390 dry tons can be handled, thus bringing all the units of the entire reduction works up to their full capacity. No further increase of crushing capacity is recommended because, under the present conditions, at least, we believe the economical limit has been reached from the mining, mechanical and metallurgical standpoints. Comparing the average per ton value of the ore treated from year to year since the present mill was built, a marked drop will be noted. It has been, however, our steadfast aim to compensate this by proportionately increasing the mill tonnage and the extremely small cost (about $8,000 U. S. C.) at which this has been attained and the bullion production which has been the result thereof has fully justified the step taken in this direction.

The extraction of silver values was 87.45 per cent., while during 1914 it was 88.63 per cent., a decrease of 1.18 per cent.

This is due to three causes: (1) more refractory ore than in 1914, (2) shorter period of treatment, due to increased tonnage, (3) owing to sulphide ore the impracticability of reducing the tailings silver value below a certain point, even if full time of treatment is accorded. The only cause we can absolutely control is the second, and as the extraction loss resulting from this is not as great as from the first, it was decided not to decrease the crushing capacity by probably 60 tons per day for the sake of perhaps gaining one-third of one per cent. in silver extraction, while at the same time producing considerably less bullion. With the possibility of less refractory ore for 1916 and the installation of the Ball Mill and Thickener Tank, we hope to get back to the 1914 extraction figure and may even surpass it. The consumption of cyanide was 3.93 lbs. per ton in 1915, while during 1914 it was 3.79.

All mill machinery has been kept in the best of running order. The breakage of some parts has been slightly greater than in 1914, but when it is taken into account that constant use has a tendency to crystallize the metal, causing the affected part to break, the matter is explained.

From old maps which came to light recently we learn that a very large open stope exists in the Rosario vein at the Lower 650 level, near the portal, being in Blocks 7 and 8. Upon opening this up we found that the ground is solid enough and the stope very well suited to act as storage, so a connection was made by a raise to the surface at the Lower 200 ft. portal. The sources which would keep this stope storage supplied with ore while rather limited, can be expected to provide several thousand tons; we, therefore, figure on being pretty well prepared to supply the mill with ore during Holy Week and also during Christmas and New Year, each of which fall on a Sunday and Monday this year.

Assay Office and Laboratory.

The assay office has been equipped with a crude oil burning assay furnace for about a year, which has proved most satisfactory in every way. Comparing the charcoal furnaces with the present oil burning furnace, the same amount of work can be done in two-thirds of the time by using the latter and a direct saving in fuel from 500 to 600 pesos per month is effected.

Motive Power.

Copious rains, which for the year 1915 amounted to 72.06 inches against 40.55 inches for 1914, supplied sufficient water to produce power necessary for all purposes. Due to the increased capacity of the mine air compressors an addition of several power consuming units in the mill, the amount of power required has been greater than ever before.

To offset these increased demands for power by (a) adding new sources of water supply; (b) conserving that going to waste when the plants work under minimum load and using it when they work at peak load; or (c) erecting a new power plant has had the very careful study of your staff.

(A) The plan of driving the Southwest cross cut to the Jucuara Gulch, as mentioned in our report of 1914, and conveying its waters through the mine workings into the Peña Blanca Gulch, from where it would find its way to the two power plants, is feasible and of great importance. The addition of this should be of material help towards compensating the increased power demands. Besides being a source of power the cross cut will prospect the intervening ground for veins and will make accessible a large territory of much needed mining timber. The heading of this cross cut was advanced 900 ft. during the year 1915 and 1,900 ft. are still lacking to penetrate the Jucuara Gulch.

(B) After careful study of the situation your staff came to the conclusion that inasmuch as the daily minimum load period is of sufficient duration to give a surplus of water, the installation of a large storage tank, even at heavy cost, was fully warranted, as such an expenditure would be very quickly paid for by permitting more continuous operation of both mine and mill. Consequently a wooden tank of 21,000 cubic feet capacity was erected at the San Juancito Power Plant pipe intake at a cost of 21,222 pesos, which tank, in conjunction with one of 1,450 cubic feet capacity, now forms a reservoir of 22,450 cubic feet. Similar plans were carried out for the Guadalupe Plant, where all that was needed was the tying in of a 12,600 cubic feet concrete tank formerly used in the old cyanide plant by 225 feet of wooden flume.

(C) Investigations made with a view of increasing the power during the dry season by installing another plant have been completed. We have found no site where sufficient power can be obtained to tide the works over the three to four months of power shortage and where the cost of installation would not be entirely out of proportion to the benefits derived.

Mine Air Compressors.

The replacing of the high and low pressure cylinders of each machine by corresponding ones of larger and more efficient type was begun in May and completed in June. Each machine is now capable of compressing to 100 lbs. per square inch, 2,120 cubic feet of free air per minute, while formerly 1,680 cubic feet was the limit. No change in the direct-connected induction motors was necessary and, although the electrical HP. input to each machine is now 416 at full load, while formerly it was but 325, no excessive heating of the coils has resulted; the ventilation of the building, however, had to be increased, and other precautions taken. The two compressors are rendering excellent service, supplying the mine with sufficient air for all purposes and, outside of requiring closer supervision, due to the overload on the motors, operate at very low upkeep cost.

Chile Mt. Prospecting Concession.

Location: About 20 miles east of San Juancito.
Area: About 1,000 square kilometers.

During the year 1915 32,594.00 pesos were expended in prospecting this territory for mineral bearing veins. Inasmuch as the greater part of the territory embraces high and precipitous mountains, thickly covered with an almost impenetrable tropical jungle, and there being no roads worthy of the name, our exploration work has been attended at times with considerable difficulty, especially so in the wet season. Nevertheless, about three-quarters of the ground has been systematically gone over and two-thirds of it eliminated as barren of productive veins.

Other difficulties experienced have been with the native settlers, of whom there are quite a number scattered throughout the Chile Mt. Many of these people, while not interested in mining, have considered the advent of mining operations in their district

as an encroachment upon their land rights, and in some instances it has been necessary to defer our explorations until the feeling against our prospectors had somewhat subsided. We are glad to say, however, that in every instance we have been able not only to eventually look over the ground at first closed to us, but to get the natives on our side besides, and in no case has it been necessary to exercise coercion. When the Chile work is completed we wish to be in a position to say to the Government that the Company has done its work without prejudice or damage to third parties and that it has had the hearty support of all the people with whom its representatives have come in contact. This, while of no importance so far as the discovery of mineral deposits is concerned, we believe will go a long way toward influencing the Government to grant similar prospecting rights as those in Chile, in other sections of the country, should the Company ever desire to obtain them.

The best showing so far encountered is at Buena Vista, a small settlement located about six miles northeast of the town of Moroceli, which is also the southeastern corner of the Chile Zone. Of the numerous veins discovered in this section only three deserve mention here and the following is a brief description of each in the order of their present relative importance.

San Rafael Vein.

The San Rafael is a well-defined, distinctly gold bearing quartz vein of apparently permanent extent, both laterally and vertically, having a width of anywhere from 1 ft. to 7 ft., with an average of about 2½ ft. The per ton values so far discovered are too low to be of commercial importance, but as there are some possibilities of better grade material at greater depth, development is being projected with this end in view.

Sebastiana Vein.

This vein has recently been cut by a small adit cross cut and, although only a few feet have been driven in it, it shows strength and good definition, being so far from 3 to 4 ft. in width, although containing very low per ton values. We believe that this vein, as well as the San Rafael, should have better possibilities at depth and therefore work is being done to attain this.

San Pascual.

The San Pascual is a quartz vein carrying more silver in proportion to the gold than the San Rafael. It has so far been quite variable in width, this being anywhere from 6 in. to 3 ft. and is not so well defined as either the San Rafael or the Sebastiana. After a few feet of drifting it split into two veins and efforts are being made to determine which one it is most advisable to follow. Here, too, per ton values are exceedingly low, but there are possibilities that the vein may become richer at depth; therefore, the development outlined has this object in view.

Conclusion.

Although some high assay results have been obtained from specimen samples of the three above-mentioned veins, the average per ton value of the sections of each vein exposed up to date is considerably below what would be termed "pay" ore. The important point, however, is that the veins are not absolutely barren, and while there are no indications as yet which would lead to the belief that richer ore can be reasonably expected at greater depth, still, at the same time, there is nothing which would lead to the contrary. Therefore, so long as the last-mentioned condition holds true, development on each of the three mentioned veins is fully warranted until such depth is attained at which pay values should be encountered, if they exist at all.

General Comments.

Ore Production.

Last June it became advisable to change the proportion of mining ore from the three different classes of reserve as far too much was coming from the calculated reserve which the best interests of the mine dictate should be held back as much as possible, or at least until materially increased by new finds. The new class of ore composed of about one-quarter of stope fills, while causing mechanical difficulties in the mill and in general ore chute No. 51, has more than come up to expectations, both as to grade and the facility with which it can be obtained. It is our plan, therefore, to raise the fill proportion to about one-third at once and even more when the additional machinery now being installed will enable the mill to handle it. It must be clearly borne

in mind, however, that if a low grade streak of fill, or even solid ore, is encountered, this must be put through the mill, even though a low production for that particular month, or even for the month succeeding, is the result, because unless the poor material is first removed the better material above it can in most cases not be obtained within economical limits. We do not say that such conditions will arise, but they should be anticipated.

Formerly the operations in any particular sections of the mine might have been the question of years; now they are of months, and consequently there is a corresponding effect not only on the grade of ore from month to month, but also upon the physical and chemical character of the ore itself. All other operations must, therefore, be changed to conform and this is particularly true of the Reduction Works.

Labor.

The severe drought which occurred during the year past while undoubtedly a great hardship upon the country as a whole, for the Company it had its advantages, inasmuch as it induced many people to seek work in San Juancito, thus there was an abundance and even a surplus of labor up to within a few weeks of the Christmas holidays. So far as the mine is concerned, it has been the general practice in the past when labor happened to be abundant to only employ a sufficient number of men needed on full development work and to break the requisite amount of ore needed; any surplus was turned away. This policy probably arose from the desire of keeping the monthly cash expenditures around a certain figure. In the future this must be reversed and no labor at all suited for mining work let go, but instead put to breaking ore in the numerous stringers and isolated vein sections, even if the total monthly expense thereby was considerably increased and ore thus produced not find its way to the mill until perhaps eight months or a year later. We believe that by adopting this policy the advantage will become apparent when a shortage of labor occurs.

Development.

No new veins have been found during the year just closed. It must be remembered, however, that these now have to be

looked for outside the connected vein system which has been keeping the mine supplied with ore for so many years and which can not be expected to do so indefinitely. The best means by which exploratory work can be done is by cross cuts into new territory which, although its rock formation may be favorable, in most cases lacks the surface vein showing evident in the vicinity of the veins system referred to and which in a mine of this nature is the best indication to go on. But again this is not entirely so, because, on the contrary, such veins as the North, Jucuara and several others do not appear at the surface at all and were only found in the course of other development. However, we see no reason for discouragement, and we believe that before the ore now available is exhausted, development into new ground will then have sufficiently advanced to determine the future possibilities of the mine.

Production.

Although the average value of the ore reserve is lower than ever before, due to the expectation that about one-third of the tonnage milled will be fill material on which mining costs are exceedingly low and the larger tonnage which it is expected to handle in the mill, we anticipate as good bullion production during the year 1916 as was obtained for the year just closed. It is assumed, of course, that a fair amount of labor will be available and that the rainy season will be an average one so that the normal amount of power can be counted upon.

Respectfully submitted,

A. R. GORDON,
Manager.

San Juancito, Honduras, January 1st, 1916.

To the President,

New York & Honduras Rosario Mining Co., New York.

Dear Sir:

We respectfully submit herewith our report for the work performed during the year ending December 31st, 1915.

General Statement.

Our statement of Production and Operating Costs, together with that for the year 1914, for the purpose of comparison, is:

Production.

	1915	1914
Dry tons crushed	117,790.	109,170.
Ozs. of silver produced	1,748,803.48	1,834,361.35
Ozs. of gold produced	15,210.637	14,298.187
Value in United States Currency	$1,178,614.48	$1,203,144.39
Extraction	88.66%	89.63%

You will note from the above that the silver production was 85,557.87 ounces less than for 1914 and the gold production 912.450 ounces more, making a difference in value, calculating silver at fifty cents and gold at twenty dollars per ounce, of $24,529.91 in favor of the year 1914.

The product was shipped to the Treasurer in:

1,325 boxes of Precipitates,
7 bars of Doré Bullion and
13 boxes of Precipitate sweepings.

The per ton value of the ore crushed during the year was less than ever before, including therewith 23,000 tons of ore from old fills against 2,300 tons the year previous, showing conclusively that a lower grade ore than ever before attempted can be treated at a fair profit.

The average per ton value of ore milled during the year was $11.29, including the old fills, which have averaged slightly lower than the estimate of their value in the statement of Ore Reserves of January 1st, 1915. In this statement the ore in old fills amounted to about 20 per cent. of the total reserve, and as about 20 per cent. of the ore treated this year has been taken from the old fills, we have preserved the balance of ore.

Operating Costs.

	Total Cost		Per Ton	
	1915	1914	1915	1914
Mining	1,055,637.36	1,087,231.54	8.96204	9.96359
Milling	659,533.36	551,326.20	5.59924	5.05015
Administration	273,861.89	248,582.13	2.32501	2.27701
Total pesos	1,989,032.61	1,887,139.87	16.88629	17.29075

You will note from the above that the per ton cost is 40.446 cents less than for the year 1914, although the total cost is greater by about 100,000 pesos. This excess over the year 1914 is accounted for by the high price of Cyanide and Zinc Dust, which are our most costly commodities. During the year 1915 we used 479,392 lbs. of Cyanide (4.14 lbs. per ton of ore treated) at a cost of 2.66 pesos per ton, while for the year 1914 we used 447,256 lbs. (4.09 lbs. per ton of ore treated) at a per ton cost of 2.17 pesos, resulting in an increased consumption of .05 lbs. per ton and an increased cost of 49 cents per ton for 1915.

During 1915 we used 115,586 lbs. of Zinc Dust, being .98 lbs. per ton at a per ton cost of 43 cents, as against a consumption of 126,856 lbs. during 1914, equal to 1.16 lbs. per ton at a cost of 28 cents, thus decreasing the consumption for 1915 by .18 lbs. per ton, but at an increased cost of 15 cents per ton, due to higher price.

The excess in the Administration cost is due to the heavy expense in the Surface Department for the repairing and upkeep of roads, the cost for 1915 being 24,686.57 pesos as against 5,006.48 pesos for 1914, also to the increased cost of schools, having added an extra grade and extra teacher to both the boys' and the girls' schools, as well as improvement to the school build-

ings. During 1914 very little was expended upon the roads, and early in 1915 we were obliged to make extensive repairs and again later in the year we had considerable expense on the roads in taking care of washouts caused by heavy rains. The greater part of the roads are now in good shape and this condition will be maintained.

The rate of exchange has favored us during the past year, which results to our advantage quite largely. In 1914 we issued drafts to the total amount of $581,295.43, purchasing therewith 1,415,193.20 pesos. During the year 1915 we issued drafts for a total of $424,229.69, receiving in exchange 1,247,157.50 pesos, a difference of about seven cents per peso in favor of 1915 as compared with 1914.

Labor for 1914 amounted to 1,048,626.09 pesos, calculated at the average rate of exchange for that year of 143.5 per cent. premium, equal to $430,647 in U. S. Currency. Labor for 1915 amounting to 1,075,709.89 pesos at the rate of 194.3 per cent., premium, the average rate for 1915, amounts to $365,515 U. S. Currency, a difference of $65,132. U. S. Currency. This amount more than makes up for the total difference in operating costs.

Mine.

During the past year the mine has produced a larger tonnage than ever before, and has at all times kept the mill supplied with the necessary ore for treatment.

Details of work on the mine, mill, expansion and technical matters are fully covered in a report of A. R. Gordon, Esq., Manager, herewith submitted.

Mill.

During the year 117,790 dry tons of ore were milled and treated. With the exception of the dry season, during which the capacity was curtailed by lack of power, the only serious interruption was during the month of November, when, owing to lack of supplies caused by heavy rains and slides blocking the roads, the Mill only operated 87.73 per cent. of the time and but 9,300 tons were treated.

The capacity and efficiency of the Cyanide Plant was increased during the year by the erection of a new slime storage tank for the filters, and by the changing of the two original storage tanks into treatment tanks. Plans for still further increasing the capacity of the mill by the installation of a small sized Ball Mill of approximately 60 tons capacity, thus equalizing the grinding equipment with the Cyanide treating plant, are about completed.

The new Merrill Precipitation Presses are being installed in the Refinery and a Case Crucible Tilting Furnace recently ordered for melting product into bars will be installed upon its arrival at the works.

Although all machinery has been worked to its full capacity, no serious trouble or delay has been experienced, and the year closes with all milling machinery and foundations in good condition.

Power.

Both the San Juancito and Guadalupe Power Plants have been working at high efficiency. The demand for power, which had been constantly increasing, culminated in the installation of the new compressor cylinders at Peña Blanca, so that now we are using more power than ever before. During the year there were several slides along the flume lines, causing temporary loss of power, but on the whole the power plants have run steadily. The erection of the large water box at the head of the San Juancito pressure pipe line, and the conversion of the old cement slime tank at the head of the Guadalupe flume line into another water box will give us additional power, and materially assist in time of need.

Administration and Surface Departments.

Under this department is embraced the keeping up of roads, buildings, etc., as shown by the Statement of Costs. On account of the large amount of supplies we are importing, it is necessary to maintain good roads, so that supplies can be quickly brought to camp, our freighting cost being a heavy item of expense.

The maintenance of schools, police, etc., is also a heavy item of cost.

The Surface Department also looks after the flume lines, the maintenance of the water supply for Cantarranas, the Tailings Canal and the general repair of employees' quarters and the buildings of the Company; all this work has been kept up in good shape.

Hospital Dept.

Owing to heavy rains during November and slides in the vicinity of our Hospital Building, the building became endangered and had to be taken down, temporary quarters for the Hospital being installed until we can reconstruct same.

During the year this department treated about 5,000 cases, of which about one-third were surgical.

The general health has been good and the living and sanitary conditions of the camp are excellent.

New Buildings and Machinery.

Probably the greatest improvement during the year 1915 was the installation of the large compressor cylinders at Peña Blanca, which were put in during the months of May and June and have since been running very smoothly, giving additional air for the machine drills and ventilation of the mine.

The next heaviest piece of new work was the construction of the water box at the head of the San Juancito pressure pipe line, and this we expect will prove its usefulness during the coming dry season.

An additional slime storage tank has also been erected for the Mill and other lesser improvements made.

General.

Government.

The Government has given us every assistance and facility in our business during the past year, and under the continued peaceful and progressive administration of Dr. Francisco Bertrand, who has recently been elected to the Presidency, we have every

confidence of continuing in full favor and accord with the Government and enjoying its assistance in all our undertakings.

Labor.

The labor situation has been fairly good for the past year, and we have suffered from no shut-down from lack of labor, excepting only on National Holidays.

Food Supplies.

Owing to the shortage of crops and the very dry season the first part of the year 1915 the Company was obliged to import a considerable quantity of corn, beans, flour, lard, etc., and this has been supplied to our employees at cost.

Freighting.

Owing to the very dry season on the South coast early in 1915, and the subsequent lack of forage, also to the large quantity of corn imported by the Government and the Company, resulting in a largely increased amount of freight to be brought up from the coast, the freight rate rose to abnormal figures and we consequently had to pay much more for freighting of our supplies, which caused an increase of cost. Freight rates have not yet reverted to normal, but it is hoped that the use of automobiles will relieve the freight situation to such an extent as to enable us to secure all the freighters we require, with a gradual return to normal rates.

Visit of Officers of the Company.

On the first of February of 1915 the Vice-President of the Company, Mr. Sidney Abenheim, accompanied by Mr. Max Tahl, visited the mine and spent nearly two months looking over the property and business of the Company. His stay was greatly enjoyed by the members of your staff in San Juancito and we trust his report to the Company was enlightening and valuable.

Loss of Employees.

By the sinking of the Steamship "Marowjine" on the voyage between Puerto Cortés and New Orleans about August 14th, we lost three of our old and trusted employees, Mr. Carl Nelson,

our assistant mine superintendent; Mr. John W. Barnett, our superintendent of Electrical Department, and Mr. E. Dean Jeffs, in charge of our Warehouse.

All had been in the employ of the Company for a number of years and were efficient and trusted men and their loss has been deeply felt and deplored by all the employees in camp.

Respectfully submitted,

A. G. GREELEY,

General Agent.

New York, January 1, 1916.

To the President and Directors of the New York & Honduras Rosario Mining Company.

Gentlemen:

The year just terminated has been one of satisfactory progress and results, and at its close the condition of your finances, plant, mine, and all other departments of your enterprise may be considered very satisfactory.

In the preceding reports the operations of the year are given in detail, and their perusal and study is of the greatest interest to your stockholders.

117,790 tons of ore treated during 1915 produced, as per returns received from the smelters, 1,749,861 ozs. silver and 15,232 ozs. gold, the total value of which was $1,191,760.70. In addition, there was received $8,981.97 from various sources, making the total income for the year $1,200,742.67.

In 1915 there were 85,052 ozs. silver less and 959 ozs. gold more produced than during 1914, making the net income from this source $48,116.43 less than for 1914.

This lesser result is due to the low price of silver which prevailed for ten months from 46¼c to 50½c per oz. Since November the price has advanced to over 56c per oz., an advance that will not alone be maintained, but further increased, according to the opinion of all interested in this metal.

The totals of income, deduction, amounts set aside for depreciation, etc., as well as the Balance Sheet, all prepared by the Security Audit Co. of New York, are presented herewith and form part of this report.

Out of the surplus earnings there were four quarterly dividends of 3 per cent. each paid during the year, a total of 12 per cent. on the Capital Stock, and amounting to $240,000.00.

With plans made and now being carried out to increase our product, with the mine in condition to supply the mill to its capacity and with the favorable outlook for better prices for silver, these features seem to indicate even a better year for your stockholders than the one just ended.

Respectfully submitted,

ERNEST SCHERNIKOW,

Treasurer.

New York & Honduras Rosario Mining Company.

Income Statement for the Year Ended December 31, 1915.

INCOME.

Production of Silver and Gold			$1,191,760.70
Miscellaneous Income			8,981.97
Total Income			$1,200,742.67

DEDUCTIONS.

Operating Expenses, Freight and Expense on Bullion and Expansion Expenses		$785,313.51	
New York Administration Expenses:			
Salaries	$40,990.67		
Directors' Fees	4,886.00		
Rent of Offices	3,300.00		
Cable and Telegrams	332.10		
Postage	420.00		
Stationery	402.27		
Legal fees	65.63		
General Expenses	2,647.86	53,044.53	
Sundry Charges:			
Visit of First Vice-President and Assistant to the Mines	1,947.08		
Taxes	2,444.62		
Interest	633.50		
Decrease in Value of Ore in Mill Bin	3,893.02	8,918.22	847,276.26
Net Income subject to Charges to provide for Reserves as shown below			$353,466.41
Set aside to Reserve for:			
Depreciation		54,186.54	
Depletion		59,538.03	
Fire Insurance		3,600.00	117,324.57
Net Income for Year carried to Surplus			$236,141.84

New York & Honduras Rosario Mining Company.
Balance Sheet, December 31, 1915.

ASSETS.

Property Accounts:				
Cost of Mine, Real Estate and Concessions			$1,500,000.00	
Property at Amapala and San Lorenzo			16,515.00	
Reduction Works, Power Plants, Electric Hauling System, Mining Machinery and other Improvements in Honduras, less Depreciation			826,892.51	
Live Stock			6,607.74	
New York Office Furniture			2,384.81	$2,352,400.06
Current and Working Assets:				
Bullion in Transit			$271,735.00	
Cash in New York			66,577.74	
Accounts Receivable			1,896.52	
Supplies Afloat			36,374.79	
Active Assets in San Juancito:				
Cash and Cash Items	$41,995.14			
Ore in Mill Bin	2,931.64			
Broken Ore in Stopes	97,020.00			
Inventories:				
General Supplies	$221,154.31			
Hotel Commissariat	6,367.96			
Store	28,835.19	256,357.46	398,304.24	774,888.29
Expansion Fund				1,950.10
Fire Insurance Fund				3,636.37
Loan to Government of Honduras, Pesos 95,772.60				38,309.04
Investment, 100 shares of Capital Stock of Banco de Comercio, Pesos 10,000.00				3,521.12
				$3,174,704.98

LIABILITIES.

Capital Stock			$2,000,000.00
Reserve for Depletion			121,531.88
Reserve for Fire Insurance			3,636.37
Drafts and Accounts Payable			59,026.97
Surplus:			
Balance, January 1, 1915	$994,367.92		
Add Net Income for year ended December 31, 1915	236,141.84		
	$1,230,509.76		
Deduct Dividends paid during year	240,000.00		
Balance December 31, 1915			990,509.76
			$3,174,704.98

AUDITOR'S CERTIFICATE.

We have audited the books of account of New York & Honduras Rosario Mining Company, kept at its office in New York, and we certify that the above Balance Sheet in our opinion is properly drawn up so as to show the true financial position of the Company on December 31, 1915.

THE SECURITY AUDIT CO. OF NEW YORK,
GEO. WEAVER, *Vice-President.*

New York, March 20, 1916.

Table Showing

Bullion Production.		Dividends Paid.		
1882	$ 2,452.27			
1883	12,900.42			
1884	149,741.39			
1885	244,444.70			
1886	224,157.58			
1887	613,446.05	1887 No. 1	$ 37,500—	2½%
1888	767,632.15	1888 Nos. 2 to 5	60,000—	4 %
1889	590,189.55	1889 Nos. 6 to 14	150,000—10	%
1890	113.28			
1891	369,587.19	1891 Nos. 15 to 16	30,000—	2 %
1892	614,498.67	1892 Nos. 17 to 21	165,000—11	%
1893	492,534.87	1893 Nos. 22 to 25	150,000—10	%
1894	392,485.92	1894 No. 26	37,500—	2½%
1895	158,164.42			
1896	449,525.88	1896 Nos. 27 to 28	30,000—	2 %
1897	568,872.06	1897 Nos. 29 to 40	180,000—12	%
1898	611,467.76	1898 Nos. 41 to 48	120,000—	8 %
1899	798,994.77	1899 Nos. 49 to 60	180,000—12	%
1900	827,443.12	1900 Nos. 61 to 75	225,000—15	%
1901	780,760.18	1901 Nos. 76 to 93	300,000—20	%
1902	490,273.34	1902 Nos. 94 to 100	105,000—	7 %
1903	436,818.29	1903 No. 101	15,000—	1 %
1904	721,374.87	1904 Nos. 102 to 108	105,000—	7 %
1905	993,065.39	1905 Nos. 109 to 121	180,000—12	%
1906	1,112,171.69	1906 Nos. 122 to 139	285,000—19	%
1907	791,347.62	1907 Nos. 140 to 153	210,000—14	%
1908	788,910.23	1908 Nos. 154 to 165	180,000—12	%
1909—10 months	636,500.00	1909 Nos. 166 to 173	120,000—	8 %
1910	890,700.00	1910 Nos. 174 to 180	105,000—	7 %
1911	887,169.59	1911 Nos. 181 to 182	90,000—	6 %
1912	944,212.67	1912 No. 183	30,000—	1½%
1912-13—12 months	1,051,273.28			
1913—last 3 months	328,100.05	1913 Nos. 184 to 188	220,000—11	%
1914	1,239,877.13	1914 Nos. 189 to 193	240,000—12	%
1915	1,191,760.70	1915 Nos. 194 to 197	240,000—12	%
Total	$21,172,967.08	Total	$3,790,000.	

Dividends 1 to 182 inclusive, on Capital Stock $1,500,000.00
Dividends 183 to 197 inclusive, on Capital Stock 2,000,000.00

New York, January 1, 1916.

To the President and Board of Directors:

It is a great satisfaction to lay before you certain facts regarding the improvements at the mine completed during the year and also to advise that the reorganization of the accounting department has been in full operation, enabling us to keep in Honduras as well as in New York an accurate check on the expenditures of cash and supplies; also to keep a close watch on the prices and quantities of all our requirements.

The expenditures for improvements in the Air Compressor plant, power plants and reduction works amounted to about $32,000.00. These were necessary for the profitable and economical running of the business and, judging from the results obtained, have realized all our expectations.

The alteration of the Air Compressor Plant has been the most important improvement and was completed in June. Both compressors are now working very well and supplying the mine with the increased air without any extra expense for maintenance.

A wooden tank was also built at the San Juancito Power Plant, which provides for the storing of a certain volume of water, which will be of material help during the dry season.

The crude oil burning assay furnace installed at the end of 1914 has given the most satisfactory results. It has been a saving both in time and fuel and has reduced the cost per assay about 30 per cent. In view of these results, it has been decided to ship an oil burning forge for the blacksmith shop at Peña Blanca and also an oil burning smelting furnace for the refinery to reduce the precipitates into bars. They are not yet in operation, but equally good results are expected.

Due to the exceptional dry season of 1914, the company was again obliged to import large quantities of flour, corn, rice, lard, beans, etc., all of which were sold to native employees at a price lower than in any other part of the country, thus not only retaining our regular employees but attracting men from other parts, which gave us a full supply of labor.

The large quantities of supplies bought at the beginning of the war were used up and in spite of the difficulties arising from the present situation we were fortunate in purchasing all needed supplies and in accumulating an ample reserve stock far ahead of actual requirements. The prices paid have been higher and indications are that they may still rise, but due to the larger tonnage treated during the year, the operating cost per ton has been slightly lower than in 1914.

In order to further increase the tonnage and reduce the per ton operating cost, another Dorr Thickener Tank is now in course of erection; it was also decided to purchase a Ball Mill. When these are in operation the capacity of the mill will be increased by about 30 tons per day.

Studies regarding the new "Oil Flotation Process" are now being made and if successful will be adopted.

Considering the physical condition of the mine, the improvements already accomplished and the rise in the price of silver, we look forward to a very prosperous year.

Respectfully submitted,

M. F. SOTO,

Secretary.

New York, March 29th, 1916.

Mr. W. S. Valentine, President,

New York & Honduras Rosario Mining Co.,

17 Battery Place, New York City.

Dear Sir:

The year 1915 has been a most successful one for the Rosario Company and the condition of the mine and the equipment of plants and mill are in such shape that the year 1916 will probably show even better results.

The mill and the power plants were very successfully operated during the entire year and no serious delays or breakages occurred, nor were there any shutdowns, except through shortage of water and labor. In fact, the continuous operation of all the plants proves the excellent quality of all machinery as well as its substantial installation and the excellent care which has been exercised by the entire staff in its operation.

Early in the year a demand was made for more compressed air at Peñn Blanca. The Ingersoll-Rand Co. had developed a new patent air valve, which they had just put on the market and found to be successful, and after careful investigation and lengthy consultations with the engineers of that company it was decided to rebuild the air cylinders of the compressors at Peña Blanca and equip them with these valves, thereby furnishing 33 1-3 per cent more air. This was perfectly practicable, provided the motors would stand the increased load; the General Electric Company advised that the motors would take the increase with no loss in efficiency or damage to the machines. The change was made during the year and the operation of the rebuilt compressors has proven the figures and the change was made at a much less cost than the installation of another machine with practically the same increased output of air.

Reductions in costs and improvement in extraction are demanding our attention and tests have been made to determine whether our ore is amenable to a combination of flotation and cyanide treatment. The first results from such tests are very encouraging, only we have not gone far enough to determine whether such a combination is practicable. Our great desire is to reduce the amount of chemicals used in our milling process and at the same time reduce the bulk of the pulp and solution to be rehandled.

Other experiments had been started in order to determine if we cannot precipitate our values with aluminum dust instead of zinc and thereby regenerate a great deal of the cyanide which at the present time is lost.

With a few minor changes in the milling plant, which are now being made, we have arrived at the ultimate capacity of the present mill, and it would not be advisable to increase it beyond the present tonnage. But we hope by the aid of the experiments which we are now making to be able to handle the present tonnage cheaper and increase the extraction.

Another and equally important phase of our operations at San Juancito is the constant development for new ore bodies or extensions of the present ones, and the same attention will be given to this work in the future; thus the outlook for the Company for the coming year is most prosperous.

Respectfully submitted,

F. H. MINARD,

Consulting Engineer.

REPORT

OF

NEW YORK & HONDURAS ROSARIO MINING COMPANY

1916

NEW YORK, JANUARY 1st, 1917

BOARD OF DIRECTORS 1917-1918

SIDNEY ABENHEIM,
LEWIS L. CLARKE,
H. A. GUESS,
I. HEIDELL,
W. C. LANGLEY,
J. C. F. JACOBY,
W. L. SAUNDERS,
M. F. SOTO,
AMBROSE G. TODD,
W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1917-1918

LEWIS L. CLARKE, *Chairman.*
SIDNEY ABENHEIM,
H. A. GUESS,
J.C.F.JACOBY,
AMBROSE G. TODD.

OFFICERS 1917-1918

W. S. VALENTINE, *President.*
SIDNEY ABENHEIM, *Vice-President.*
J. M. DeHART, *2nd Vice-President.*
ERNEST SCHERNIKOW, *Secretary & Treasurer.*
J. PERLMAN, *Asst. Secretary.*

Report of the Board of Directors of the New York & Honduras Rosario Mining Company.

NEW YORK, January 1, 1917.

To the Stockholders:

It is with pleasure that the Board of Directors presents the Thirty-sixth Annual Report of your Company, wherein is a compilation of what has been accomplished during the year just past, and a general outline as to the condition of your property.

The Board can congratulate the stockholders on the fact that not only has the past year been the one of banner production, and the dividend record the largest in its history, but the physical condition of the mines at the beginning of this year is most satisfactory.

During 1916 *dividends amounting to* $400,000.00, *being* 20 *per cent. on the capital stock, have been paid. Your working assets have been materially increased. The price of silver has been favorable. A year ago, an upward turn in the price which then was* 55c *per ounce, was reported. This upward course continued during the entire year, it having reached its maximum value of* 76¾c *per ounce in the month of December.*

The works were further favored by most copious rainfalls, and barring occasional shut downs there was ample water for all purposes. The total rainfall was 77.73 *inches, the largest recorded in the history of the Company.*

The continuance of the European War has further increased the cost of material and supplies; nevertheless, a decrease in the per ton cost of operation is shown.

The Mine.

Particular attention is called to the report of the General Manager hereto appended. As shown therein the mine was called on to deliver 128,030 *tons to the mill; this tonnage had a value of* $10.42 *per ton as against* $9.76, *which was the average value of ore reserves reported at the beginning of the year. This was done without any extraordinary strain on reserves.*

Development work was pushed with vigor and several new veins have been opened up which promise well for the present year. There were 12,637.5 *feet driven on development, and in spite of the increased cost of all materials this was done at a saving of* 21 *cents per ton under the year previous; the total mining cost was* 40 *cents per ton less than* 1915.

A study of the detailed report on the various veins in actual exploitation will give a clear idea of the future prospects.

The South West Cross cut, of which mention has been made in several previous reports, is now nearing completion, there lacking only about 600 *feet to "daylight" on the Western slope of the mountain. The total length of this Cross cut from its starting point in Block* 84 *to the Western slope is approximately* 3,000 *feet. From a prospecting standpoint it will serve to thoroughly develop the entire far Western territory; from an economic standpoint it will open up vast timber sections heretofore inaccessible. This timber can be delivered directly inside the mine and distributed to the various levels at a greatly reduced cost, and, finally, the waters on the Western slope will be diverted, through this tunnel to the Eastern slope and there joined with the present streams furnishing the hydraulic power. This will be an important adjunct for increasing power.*

The Mill.

The occasional stoppages of the mill during the year on account of repairs and shortage of water totalled a loss of only 12 *days; this certainly is an excellent showing for this plant and does high honor to your staff.*

Several improvements and additions were made during the year, tending to better percentage of extraction. Tests on Oil Flotation, *to which attention was called in last year's report, having been concluded a small plant has been installed. This process will be generally adopted in the various properties of the Company.*

Expansion.

The plan adopted by your Board of Directors to acquire other properties outside of the limits of the Rosario mines, but within the zone of its direct management, has progressed favor-

ably. The General Manager's report is replete with detailed information thereon, and the prospects are considered as favorable for the present year.

Financial.

The Treasurer's Report herewith presented shows a financial strength never before attained.

Stock Market.

In May, 1916, *your stock was admitted to trading on the New York Curb Market.*

Official Visit.

The Second Vice-President, Mr. Joseph M. DeHart, sailed from here on January 27th, 1916, *reaching the mine February* 16*th, on a regular trip of inspection and consultation with the General Manager and staff. Every detail of the Company's business was covered and many valuable suggestions made.*

Management.

A. R. Gordon, Esq., E. M., your General Manager, has, if possible, shown greater zeal and energy in the discharge of the trust confided to him by your Board. He has been assisted by an able staff and every credit is here registered to them for the success attained in the year just closed.

Government.

It is very gratifying to report the continued friendly relations with that statesman, Dr. Francisco Bertrand, President of Honduras, and his Cabinet, as also with the local authorities of the country. The progressive spirit of Dr. Bertrand and his liberal ideas for the development of the resources of his country have been the cause of highest encomium and his weighty assistance to your Company in times of need has been of material good in the steady march of your works. He has at all times been ready to receive and discuss with your representatives such matters as were deemed necessary to lay before him, and your representatives honor themselves with the true friendly feeling always shown by him. Under his government the country has en-

joyed absolute freedom from strife. By justice and non-partisanship he has concentrated all political parties, thus assuring an uninterrupted and steady development of the natural wealth of the country.

New Director.

It was the Board's good fortune to secure H. A. Guess, Esq., E.M., Managing Director of the American Smelting & Refining Co. Mr. Guess, since taking his seat on August 24th, 1916, has displayed a continuous interest in the Company's affairs and has made many very valuable suggestions that have been fully appreciated.

Necrology.

It is with deep regret that your Board has to report the death of its fellow member of many years, H. H. Babcock, Esq., of Westerly, R. I., which occurred on December 8th, 1916.

Respectfully submitted,

W. S. VALENTINE,

President.

San Juancito, Honduras, C. A., January 1, 1917.

To the President:

New York, N. Y.

Dear Sir:

We respectfully submit the following report of work performed on the Company's properties at San Juancito during the year ending December 31st, 1916.

A brief resumé is also given of exploration work on the several mines and prospects in Honduras at present held under option.

Production.

	1916	1915
Dry Tons Crushed	128,030	117,790
Ozs. Silver Produced	1,810,886	1,748,803
Ozs. Gold Produced	14,989	15,211
Value U. S. Currency: Silver, 50c., Gold, $20.00 per oz.	$1,205,218	$1,178,614
Increase	$ 26,604	

The above product was shipped to the Treasurer and consisted of 644 bars Doré Bullion and 569 Boxes Precipitates.

The Doré Bullion averaged 949 silver and 7.93 gold Fine, and the Precipitates, 862 silver and 7.03 gold Fine.

The production during 1916 exceeded that of 1915 by $26,604. (silver being taken at 50c per oz. in each case), and, therefore, is the largest in the history of the Company. As the operating costs, in spite of the marked increased price of all materials and lower exchange rate, have been exceedingly low and the returns which you have received for the bullion higher than for some years past, the year 1916 has, indeed, also been the most prosperous in the history of the Company.

As will be shown under the various headings to follow, the Mine has considerably more ore than is necessary for the requirements of 1917; and the Mill as well as all other plants are in good condition, therefore, if a normal amount of labor is available and world conditions, in so far as they affect operations in Honduras, do not get worse than they have been, we look for about the same bullion production in 1917 as resulted in 1916.

Total Operating Costs.

Annex "A" herewith gives in detail the operating costs of all departments, comparison being made with the year 1915.

The following is a resumé of total net operating costs:

Resumé of Total Operating Costs (In Pesos).

			(Cost per ton)	
	1916	1915	1916	1915
Tonnage Basis	128,030	117,790		
Mining	1,054,319	1,055,637	8.23	8.96
Milling	708,523	659,533	5.53	5.60
Administration	306,117	273,862	2.39	2.33
	2,068,959	1,989,032	16.15	16 89
Increase	79,927			
Decrease			.74	
Value of peso.....39c U.S.C.		34c U.S.C..		
Cost per ton in U. S. Cy....			$6.30	$5.74

We draw your particular attention to the above comparison which shows that in spite of the fact that, due to the European War, there has been a marked increase in the cost of all materials, the total expenditures were increased only by 79,927 pesos (68,693 pesos of which was for labor) in 1916, although 10,240 dry tons more were treated in 1916 than in 1915. You will also note that there is a marked reduction in the cost per ton in 1916 as compared with 1915.

As shown, the average value of the silver peso during 1916 was 39 cents U. S. C., corresponding to an exchange rate of 259 against 34 cents U. S. C., or 294 for 1915. This signifies that labor, which is paid in silver, actually received about 14.5 per cent. higher pay in 1916 than in 1915, when figured on a gold basis. The same of course applies to all other payments made in silver. However, while silver currency cost 14.5 per cent. more

in 1916 than in 1915, this has very fortunately been more than offset by proportionately better bullion settlements.

Labor during 1916 cost 1,144,403 pesos or $446,317 U. S. C., while in 1915 it cost 1,075,710 pesos or $365,888 U. S. C., showing that in 1916 the increase of this item in pesos was but 68,693 pesos, while in gold, due to the higher peso value, it was as much as $80,429 U. S. C.

THE MINE.

Ore Reserves.

On Annex "B" is shown the detail of Ore Reserves for the year 1916, the general summary of which is given here below. Silver is taken at 50c U. S. C. per oz. troy, and gold at $20.00 per oz. troy.

Summary.

	Tons of Ore and Waste	Total Value U.S.C.	Value per ton at Mill U.S.C.
Calculated ore in place at 13 cu. ft. per ton	58,768	$ 825,698	$14.05
Broken ore in stopes at 21 cu. ft. per ton	28,725	$ 287,250	$10.00
Estimated ore in place at 13 cu. ft. per ton	98,650	$ 902,750	$ 9.14
Vein Fills in place at 17 cu. ft. per ton	126,000	$ 955,000	$ 7.58
Totals	312,143	$2,970,698	$ 9 51

The same method of procedure and degree of care was taken in figuring this year's ore reserves as in years past. Although 128,020 tons of a gross value of $1,334,957 were mined during 1916, the reserves presented herewith when compared with those of last year show a decrease of only 31,573 tons and $382,400 U. S. C. in value. In other words, about 70 per cent. of the tonnage as well as value mined during 1916 has been replaced by new discoveries. For a mine that has been operating 37 years this is a good showing.

Due to underground conditions we have been obliged this year to do more estimating of the reserves than ever before. The personal element naturally enters much more into such a method than when the reserves are calculated, but your staff has been with you many years, has seen and been instrumental in the tran-

sition of the mine from an 80 tons per day high grade proposition into a 360 tons per day low grade proposition, therefore it is thoroughly acquainted with all details and actual ore conditions of the mine and is able to accurately apprise you of very nearly its true status. However, all that is necessary to put the method in question to the test is to make comparison of the yearly reserves from the time it was first adopted in the year 1912. You will find that the figures are remarkably close, there being virtually no overestimates, but on the other hand several underestimates, the latter which of course is on the safe side, also neither has the method been ultra-conservative. Annex "C" illustrates the point made above as applying to the year 1916.

The average value per ton of this year's total reserves is $9.51 U. S. C. as compared with $9.76 for last year, a decrease of 25c, and it has been brought down by the large quantity of low grade fill material. But as this fill material will not be mined in 1917 in the same ratio that it bears to the total reserves, but probably represent around 35 per cent. to 40 per cent. of the total tonnage milled, the battery grade for 1917 should therefore be proportionately higher. The same conditions held true in 1916 when the average value of the total reserves was $9.76 per ton, although the average battery grade actually was $10.42.

Good progress was made in recovering the extensive workings of the old veins, and that it has met with gratifying success is amply evidenced by the figures of both the estimated ore and fill reserves. We have been exceedingly fortunate with the fills, these running more uniform as to value in 1916 than there was any reason to expect. The recovery work is not as yet concluded and it shall receive the same careful attention during 1917 that it did during the year past.

We submit herewith a complete set of blue prints of the Mine maps, both in plan and longitudinal section, which have been brought up to date and on which some of the ore reserves are indicated. As in the longitudinal sections the advance made is shown by months, you will be able to make comparison with the year before as well as note in what section of the respective veins the work was done.

Development.

Development during 1916 amounted to 12,637.5 feet distributed in drifts, cross-cuts and raises as shown in detail on Annex "D." During 1915, 13,000.5 feet were driven, showing a decrease of only 363 feet in 1916.

Development costs were as follows:

	PER FOOT	
	1916	1915
Development	16.97 pesos	17.46 pesos
Timbering for same	.93 "	1.07 "
Tramming for same	1.93 "	1.83 "
	19.83 "	20.36 "
Cost per ton ore broken	1.94 "	2.18 "

Ore Production.

Stoping.

The summary of Ore and Fill material sent to the Mill during 1916 is as follows:

	1916	1915
Ore broken from veins	81,513 tons	90,162 tons
Ore from Development	6,471 "	4,120 "
Stope Fill Material	40,046 "	23,508 "
	128,030 "	117,790 "
Increase	10,240 "	

The details of the above summary by veins and months is presented on Annexes E and F herewith.

Stoping Costs (Pesos).

	Total Costs		Per Ton	
	1916	1915	1916	1915
Stoping	415,828	418,517	3.23	3.44
Timbering for same	66,555	59,309	.51	.49
Tramming for same	135,355	114 949	1.05	.95
	617,738	592,775	4.79	4.88
Decrease			.09	

The above stoping costs are based on 129,275 tons broken during 1916 and 121,590 tons in 1915, and do not include other operation charges which amounted to 1.57 pesos per ton in 1916 and 1.51 per ton in 1915.

Total Mining Costs (Pesos).

The total mining costs, which include Development and Stoping as well as all other mine charges, are:

	Total Costs		Per Ton	
	1916	1915	1916	1915
Tonnage crushed	128,030	117,790		
Labor	746,980	710,454	5.83	6.03
Supplies	345,355	344,134	2.70	2.90
Power	17,684	18,449	.14	.16
	1,110,019	1,073,037	8.67	9.11
Less Adjustment Broken Ore in Stopes Account	55,700	17,400	.44	.15
	1,054,319	1,055,637	8.23	8.96
Increased tonnage	10,240 tons			
Decrease, total costs	1,318 pesos			
Decrease cost per ton	.73 "			

The above figures show that not only did the Mine produce about 8 per cent. more ore during 1916 than 1915, but it did so at an actually slightly lower total cost, which resulted in a decrease of 73 centavos per ton, the greatest since the present mill commenced operating.

Veins.

The following is a brief discussion of each vein under its corresponding heading.

South San Miguel Vein.

There is every reason for satisfaction with the past year's development of this vein regarding which so little was known only a year ago. The theory as to its existence south of the West vein, explained in detail in last year's report, but omitted in the printed copy, has proved a correct one in every way as is evidenced by the reserve of 21,634 tons of milling ore worth $13.09 U. S. C. per ton. The present indications are such as to venture the opinion that the ore already found is by no means all that can be expected, therefore, during the coming year the vigorous development planned should add materially to already existing ore reserves.

The principal development of this vein was done at the Upper 350 level. In the latter part of the year the vein was also

found at the Upper 250 level and Upper 450 level, and during the coming year the object will be to not only develop its southern extent at the levels at which it is already exposed, but to locate it at the Upper 550 and above as well as below the Upper 250 level.

North San Miguel—Concepción.

This section was a large producer during the past year and still bids fair to be so during 1917. The ore came principally from the levels above the Upper 550 in the vicinity of the West vein, some of the stopes now being advanced over 350 feet above that level. A good stope of ore found at the Lower 300 level has not as yet been exhausted, as well as a body north of the shaft at the Lower 100 level and one at the Upper 250 level just north of the West vein.

It is probable that some ore will still be found here and there, but as a big and permanent producer this vein is now approaching the end as both its vertical and lateral limits have been pretty well determined.

Rosario Vein.

Although this famous vein was the first one to be worked by the Company and gave impetus to the magnitude that its present operations have attained in Honduras, it was once more, and after 37 years of almost continuous production, the largest ore producer with respect to tonnage during the year 1916.

The ore came principally from Blocks 15 to 35 inclusive, at and above the Lower 200 level and Blocks 33 to 40 at and above the Upper 200 level. The ore and fill reserve is still ample, therefore this vein will also be an important producer in 1917. Some recovery of old workings is still lacking in various sections and this shall be prosecuted as conditions demand.

San Joaquín Vein.

This vein was second from the standpoint of tonnage production during the year and the substantial ore reserves still remaining indicate that it can continue to supply large quantities of ore if required.

Development during the year consisted mainly in making available for stoping the blocks of ore of the 1916 reserve and no new ore was found during the year. Drifting at the Lower 650 level was discontinued mainly due to haulage difficulties, but when the new electric locomotive already ordered arrives, this work will be resumed if at that time development indications at the upper levels make it advisable to do so.

Candelaria Vein.

Outside of 61 feet of drifting no other development was done in this vein during 1916, the time being devoted to stoping entirely, 5,838 tons being produced. This ore came mainly from the Lower 200 and Lower 300 levels, and while not of very high grade its mining has been cheap, therefore it yielded a fair profit.

Practically nothing has been done to prepare the stope fills for mining, but it has been determined that a larger quantity of such material can be expected than was first supposed, therefore the 8,000 tons estimated for 1916 have now been raised to 15,000 tons.

Guadalupe Vein.

Considerable development of this vein was done at the new level, the Lower 550, the object being to get beneath some territory stoped at the Lower 450 level. Some ore has been found which we expect will improve in value as the stopes approach the Lower 450, and as it is very conveniently located with respect to the Lower 650 haulage, mining costs should be low. Some development was also done at the Lower 650 level, but due to haulage difficulties we were obliged to discontinue it. When the new locomotive arrives and work can again be resumed the object would be to drive a sufficient distance so that a cross-cut could be started towards the Nueva and Colonia veins. A few bunches of ore were found at this point, but only by driving some raises can their value as well as extent be determined.

3,003 tons of ore and 8,123 tons of fill material were mined during 1916, the ore coming mostly from the Lower 200 and Lower 300 levels, and the fills from old stopes between the Peña Blanca and Upper 500 levels.

West Vein.

The section between the Peña Blanca and Upper 250 levels, which was considered too poor to mine when the Mine was on a high grade basis, has been partly explored during 1916 and rich stopes of ore found which have been of aid in maintaining the battery grade. Considerable of this ground still remains and it is expected that as good ore will be obtained from it during 1917 as during the year past.

Probably no vein in the Mine yielded as much net profit as the West vein during 1916, and this was mostly obtained from 11,906 tons of fill material from the old stopes which was comparatively rich and on which mining costs were very much lower than on the solid ore, even from the cheapest mined vein.

In spite of the quantity of fill already taken out, recovery work in 1916 has disclosed that about 53,000 tons more can be expected, therefore this vein will be an important producer of this material for some time to come.

Arrangements have been made to work the fill systematically from the highest levels downwards, which will mean that a maximum of material will be obtained with a minimum of danger from caving, both to the labor and the workings, which must be kept open.

Southwest Vein.

This vein was our best source for high grade ore the bulk of which came from the Zero level entered through the winze in Block No. 72. Stoping, however, has been concluded at this point so during the coming year the plans are to sink the winze deeper, as we consider the chances for more ore below the Zero level to be good, and also drive further both headings at the Zero level.

Our efforts to prospect the vein above the Upper 350 level have been moderately successful, and stoping is now in progress at that point. The upper extent of this ore has not as yet been reached and as there is considerable territory overhead there are good chances that it may continue for an important distance.

Jucuara Vein.

All the ore above the Peña Blanca level has been stoped, the block below this level still remaining intact. Before it is removed the winze should be sunk deeper and a level cut at about 100 feet. Considerable trouble has been experienced with water in the winze, which has held up the sinking, but we are now better prepared to undertake this work and shall probably commence it during the coming year.

Some drifting was done to the east at the Peña Blanca level, and while now and then encouraging signs were encountered, no ore was found. The best prospects appear to be below the Peña Blanca level, and these can only be exploited through the winze mentioned.

Colonia Vein.

This has truly been a remarkable vein in that it has been a steady and good producer for the past nine years, although the vein is generally narrow and the ore very bunchy. Last year 8,455 tons were mined and the indications are that a good quantity of ore can also be obtained in 1917.

Some drifting was done from the surface to connect with the highest stope of the Upper 100 Colonia level, and good ore is expected. There are possibilities that the ore known to exist in the floor of the Lower 300 foot Rosario level may extend considerably deeper, therefore it is planned to drive a cross-cut at the Lower 650 level, off the Guadalupe vein, sometime in the near future, and explore this section.

Nueva Vein.

Not much work was done in this vein during the year, its ore production being only 636 tons, and fill material 504 tons. The probabilities are that during 1917 this vein will receive more attention from a productive standpoint, and it is also planned to develop it below the Lower 450 level by a cross-cut off the Guadalupe vein, either at the Lower 550 or Lower 650 level.

Socorro Vein.

This vein has more than come up to our expectations as an ore producer, one block alone yielding more ore than the total

of the 1916 reserve. Workings idle for several years are now being reopened and it is expected that this vein will be as heavy a producer in 1917 as in the year past.

San Vicente Vein.

The work in this vein in 1916 proved somewhat of a disappointment. The vein is very narrow and the ore very bunchy in character, which makes it very difficult to obtain a paying grade of milling ore. However, there is reason to believe that the most favorable section of this vein has not been reached as yet, so efforts will be made to enter that district in the near future.

Capitana Vein.

While the Capitana vein was a heavy ore producer during 1916 and can be expected to yield a good quantity of ore in 1917 it is now pretty well worked out so far as its present known limits are concerned. There are ore possibilities above the Upper 550 level and below the Lower 100 level, which it will be our effort to determine in the near future.

Culebra Vein.

The vein was again found at the Upper 500 level and some drifting done thereon to the south which disclosed a rather narrow vein, but of stoping value. The winze was sunk to a depth of 90 feet, and a drift both to the north and south started which disclosed a vein of better width than at the Upper 500 level, but of lower value, which, however, can be stoped.

The development to the south at the Upper 500 level we consider important as the vein may have some relation to several favorable surface showings towards which it is heading.

Ore amounting to 799 tons was obtained from the old stope at the Upper 500 level and the probabilities are that a like amount or more will be produced during the coming year.

Crisanta Vein.

This vein was found very many years ago and some development done in it at the Upper 900 level. In the early part of last year it was cut at the Upper 700 level, and some ore found which

yielded 1,710 tons. The limit of this body has not as yet been reached, and as it is expected to also do some stoping at the Upper 900 level, this vein should be an important ore producer in 1917.

Buena Ventura & Northwest Veins.

Both these veins have much more than come up to all our expectations, each producing more fill material during 1916 than originally estimated, this being particularly true of the Northwest, which, although its fill estimate was 7,000 tons, yielded 9,402 tons. The ore estimate in the Buena Ventura, while placed at 4,000 tons in the beginning of 1916, yielded actually 5,134 tons, all of which is quite satisfactory.

The ore and fill estimates for 1917 show that the resources of each vein are still ample, therefore they can be made to produce as heavily for the coming year should this be desired.

Veins Not Worked During 1916.

The veins not worked during 1916 were the Catalina, North and Los Cedros, the status of each is, therefore, the same as advised in last year's report.

Esperanza Vein No. 3.

Stoping was moderately successful in this vein, the tonnage produced being satisfactory but the grade pretty low. There are sections still remaining to be stoped and an effort will be made to bring the ore to a better grade by more careful sorting.

There is reason to believe that this vein may be the South San Miguel, so during the coming year this point will be definitely determined as it may have important bearing pertaining to the future development of each vein.

Cross-Cuts.

Peña Blanca-Esperanza Cross-Cut.

This important development advanced 598.5 feet in 1916. In the latter part of the year small valueless stringers and slips were cut, all running more or less at right angles to the cross-cut, indicating that its direction, southwest, is about right. Quite re-

cently a vein averaging about 1 foot in width was cut which has been named the "Porvenir." Subsequent development thereon to the southeast has shown that it is ore bearing, and, while nothing of much commercial value has as yet been disclosed, it is our opinion that this new find has good ore possibilities and therefore deserves extensive development.

The rock southwest of the Porvenir vein has undergone some movement and other changes. This we consider favorable and, therefore, hope to encounter more stringers or veins, some of which may be ore bearing.

Due to the very hard rock, progress has been slow, but during the coming year arrangements will be made whereby work in this section will be materially increased.

Southwest Cross-Cut.

The Southwest Cross-Cut was advanced 1,326 feet during 1916 and about 600 feet are lacking to the surface on the western slope of the mountains in the Jucuara Gulch. All the work done during 1916 was in rock not favorable for ore deposition, as explained in the 1915 report, that in which veins could be expected to exist not having been encountered, although existing on the western slope. When the cross-cut reaches the western slope this territory will be thoroughly prospected, the several stringers or veins already known to exist developed, and if any ore is found it can then at once be sent to the Mill if necessary. Besides serving as a base for prospecting and development of the western slope, this cross-cut will also open large tracts of cheap mining timber, now a costly article, and it is planned to divert some of the streams through it to the eastern slope, which, passing through both the San Juancito and Guadalupe Power Plants, should be of considerable help during power shortage.

Geology.

Geological investigations of the entire zone as well as surrounding country were concluded last September, the data being plotted on suitable maps correlated by supplementary reports. The rocks favorable and unfavorable for ore deposition have been

generally classified and located, thus in outlining future development such data should be of aid in indicating sections to be avoided as well as those of promise.

There not being sufficient work to warrant the expense of a permanent geologist, his services were dispensed with. The Geological Department, however, will be maintained, the work being done as required by any of several men of the staff.

Future Development.

In the short space of a year, the San Miguel South vein has emerged from a questionable prospect into an important and profitable ore producer, thus coming up to all expectations. Its development has by no means been concluded and we might say that the outlook is such as to make it probable that the San Miguel South will be the best source for finding ore in important quantities during 1917.

There are indications which lead to the belief that the Esperanza Cross-Cut has now entered more favorable territory. Due to the immediate surface under which it is projected being partly capped by a flow of rock of more recent origin than that in which the veins of this district exist, there are, with one or two exceptions, no surface vein indications. However, this is no sign for discouragement as many of the big ore producers of this mine do not come to the surface at all.

Although the Porvenir vein is a very recent strike we consider its outlook encouraging and look for ore in workable quantity to be developed during the coming year.

No development was attempted in a northerly or northwesterly direction during the year, our efforts being directed to sections which held out promise of quicker ore. If possible, some work may be started during the coming year and probably from the Lower 300 San Joaquín N. W. Heading and Concepción Heading N. on the same level.

Mine Economics.

Haulage.

Both the Peña Blanca and Lower 650 level electric haulages rendered efficient service throughout the year and were called upon to handle more material than ever before. As these two

installations have now been in use several years general overhauling became necessary and particularly at the Lower 650 level. Practically all the ties have been changed at the latter haulage and all the cars equipped with roller bearings of latest design. Due to the prospective increase of haulage distance, as well as of material to be handled at the Lower 650, an additional locomotive of greater capacity than any at present in use was ordered and when in operation should be of material help.

Drilling Equipment.

The drilling equipment is being kept up to standard and the most efficient type of both drifting and stoping machines constantly adopted.

Timber.

Mining timber and lumber still continues to come principally from the eastern slope of the mountains and, due to scarcity, commands high prices. But as we expect the Southwest Cross-Cut to penetrate the western slope in about the middle of the coming year we believe that not only will this new source yield all the timber necessary for our purposes, but that this can be obtained at considerably lower cost for some time to come.

The Mill.

Tonnage Crushed.

	1916	1915
Total wet tons received	148,395	134,672
Average per cent. moisture	13.7	12.6
Total dry tons crushed	128,030	117,678
Average per day crushed (366 days)	350.7	322.7
Average per day full running time (352 days)	364.4	
Average per day full running time (335 days)		351.3

Recovery.

	1916	1915
Average ozs. silver per ton	15.88	16.97
Average ozs. gold per ton	.124	.140
‡Average value per ton U. S. C.	$ 10.43	$ 11.29
Total ozs. silver by assay	2,033,737	1,999,652
Total ozs. silver recovered	1,810,886	1,748,803
Average silver extraction	89.04%	87.45%
Total ozs. gold by assay	15,904	16,476
Total ozs. gold recovered	14,989	15,211
Average gold extraction	94.24%	92.32%
‡Total value treated U. S. Cy.	$1,334,958	$1,329,343
‡Total value produced	$1,205,219	$1,178,614
Average per cent. recovery	90.28	88.66

‡Silver taken at 50c U. S. C. per oz.
‡Gold taken at $20.00 U. S. C. per oz.

Supplies Used Per Ton.

	1916	1915
Sodium Cyanide 130%	3.678 lbs.	3.930 lbs.
Zinc Dust	.894 "	.980 "
Lead Acetate	.068 "	.211 "
Lime, 49.4% Available	29.690 "	35.500 "
Tube Mill Pebbles	3.132 "	3.58 "

Total Milling Costs (Pesos).

	Total Cost Pesos		Cost Per Ton	
	1916	1915	1916	1915
Labor	121,756	122,756	.95	1.04
Supplies	559,998	509,235	4.37	4.32
Power	26,770	27,542	.21	.24
	708,523	659,533	5.53	5.60

As you will gather from the above figures the Mill crushed 10,240 dry tons more in 1916 than in 1915, which brings the average daily crushing rate up to 350 dry tons per day, as against 322.7 for 1915. The annual dry season, during which it is necessary to stop the Mill for about 6 hours per day on account of power shortage, is included in the above crushing rates, otherwise they would be even greater. Full advantage is taken of such periodic suspension of operations to make all necessary changes and repairs, thus when the rains come and full power is again available the Mill is able to operate at a very high percentage of full running time.

There is also a marked increase in both the silver and gold extraction as compared with 1915. In 1916 the silver extraction was increased by 1.59 per cent. and the gold by 1.92 per cent., and on the total value this was 1.62 per cent. This fully comes up to our expectations as expressed under this heading in the 1915 report, and while it would be too much to expect even better results in 1917 the aim will always be to maintain as high an extraction as is consistent with the economical limit established by the quantity and cost per ton of the chemicals used and the value recovered by such increased extraction on the other. In these uncertain times, and when such an article as cyanide, for instance, has materially increased in price and even then is difficult to obtain, it would be good business to drop slightly the extraction if such loss is compensated by a corresponding saving in chemicals.

Indeed, present milling practice tends in that direction and perhaps now as much attention is being paid to the economical limit as formerly was paid to the obtaining of high extractions, in many cases regardless of the attending cost. Our aim will be to work along the most economical lines during 1917.

There has been a marked decrease of supplies used per ton in every instance during 1916, when comparison is made not only with the year 1915, but with all years since 1912, when the present Mill commenced operating.

An important saving was effected in the lime, a rather costly article, when the additional Dorr Thickener Tank was placed in operation last July. The average lime consumption from January 1st to August 1st was 35.6 lbs. per ton, while from August 1st to December 31st it had decreased to but 21.7 lbs. per ton, engendering a saving of 13.9 lbs. per ton, which will pay very quickly for this additional Thickener installation.

One Case Crucible Tilting Furnace was installed in the early part of the year for the purpose of melting the precipitate into Doré Bullion bars, and 644 of these were produced. Shipping the product in this form does away with certain losses met with when it is shipped and marketed as precipitate. Besides there is also a fair saving from the operating standpoint when based on the pre-war cost of supplies. This furnace has proved satisfactory and a duplicate has just been added as the work is a little too much for one unit. Here, too, there is an economical limit, due to the high cost of supplies, and when it is found that it is more advantageous to resume shipping precipitates this shall be done.

In the latter part of the year some laboratory experiments were made with aluminium dust precipitation, the object being to determine about how much cyanide could be regenerated when this element is used as a precipitant. It was found that several points could not be cleared up until the process was tried on an actual working scale. Therefore, when the cyanide shortage arose in December and it looked as if it might be necessary to suspend milling operations, it was mutually decided to adopt aluminum to take advantage of what cyanide saving might ensue. Under normal conditions it is probable the process would not have been adopted at this time as it is an experiment and the

results claimed are not altogether certain under our milling conditions, but if it is not a success, present zinc dust precipitation can always be gone back to. The supplies for aluminum dust precipitation have already been ordered and the necessary mechanical changes are now under way, so it should not be long before the process is thoroughly tried and its advantages and disadvantages determined.

Besides the Hardings Ball Mill and Dorr Thickener Tank of which you were advised last year, an additional electric precipitate drier was installed. The two driers are rendering satisfactory service and eliminate the expense of wood burned in the old method of pan drying.

The Ball Mill is installed, but has not been put in use as yet. As soon as the cyanide shortage crisis is somewhat relieved the plan is to give this unit a thorough trial and determine its advantages both as to the reduction of sand percentage and tonnage increase.

The lack of sufficient bin capacity has been pretty well overcome by the adoption in the early part of the year of Chute No. 8 to act as a ready ore storage, it being located at the Lower 650 foot level and near its portal. Ore from this source enabled the mill to operate at full capacity on several occasions during the past year when labor was short or an accident occurred to the haulage. Therefore, the money spent in making the required connections with this chute on the upper mine levels has been a very good investment. The aim is to keep a good supply of ore at this storage and we expect that it will serve the mill as well in 1917 as in the year just closed.

Assay Office.

The number of assays run during the year was 29,576 at an average cost of 54c silver per assay. This department is capable of taking on considerably more work without any additional outlay for labor, therefore if the number of assays increases, the cost per assay should materially decrease. It is always well to have plenty of latitude in this department so that when a large lot of samples arrive from any of the Expansion projects they can be assayed without delay.

Power.

The total rainfall during 1916 was 77.73 inches, distributed over 169 days, with a maximum in August of 15.52 inches, while in 1915 it rained 72.06 inches in 172 days, with a maximum of 14.49 inches in June.

The rains during 1916 were particularly favorable from the power standpoint as they were more evenly distributed, good showers occurring during the dry season which augmented power considerably.

The two hydro-electric power plants, Guadalupe and San Juancito, rendered continuous service, supplying more power than ever before. During 1916 their output was 6,844,290 kilowatt hours at a total cost of 45,740 pesos, while in 1915 it was 6,349,080 kilowatt hours at a cost of 47,988 pesos. In other words, in 1916 the two plants supplied 495,210 kilowatt hours more than in 1915, but at a total cost of 2,248 pesos *less* than in 1915.

In the 1916 cost stated is also included the outlay for replacement and repair of the power transmission line, not a small item, so even cheaper power service was rendered in 1916 than at first appears. The transmission line in question is 16,000 feet long and the stretch from Guadalupe to Carboneras switch house, a distance of 6,000 feet, was completely rebuilt, a lighter wire being used and the 48 poles replaced by 7 towers. The remaining portion of the line has also been pretty well overhauled and what little still remains will be concluded early in 1917. As repair work on the transmission line requires shutting off the current, it means that both Mine and Mill must frequently be stopped. To avoid this a duplicate line is now being run from San Juancito to the switch house and from this to Rosario. It is also being placed on towers and this work is now nearing conclusion.

The two air compressors at Peña Blanca rendered continuous and excellent service at extremely low upkeep cost. The new cylinders which produce about 33 per cent. more air have proved of undoubted advantage over the old and smaller type, and the electric motors which have had to take this extra load did so readily and within safe temperature limits.

The power distribution during 1916 was as follows:

Mill	3,972,000	kilowatt	hours
Mine	2,286,000	"	"
Electric Haulage	342,000	"	"
Surface Department	68,000	"	"
Surface Department Light	68,000	"	"
Mill Lights	34,000	"	"
Mine Lights	34,000	"	"
Machine Shop	20,145	"	"
Laboratory	20,145	"	"
Total	6,844,290	"	"

Administration

Under this heading are embraced all operations and expenditures not included under the Mine and Mill Departments. This department has charge of all maintenance of flume lines and slime canals, the repair of all roads, the police force, schools, Medical Department, as well as many other lesser branches.

Due principally to very heavy expenditures for repairs on the road to Tegucigalpa, which amounted to 35,000 pesos, the operating costs of this department have been heavy during 1916. However, it is expected to reduce this road item considerably during 1917, and as there has also been some reorganization and reduction of the surface force we look for lower costs during the coming year.

Honduras Store.

The Honduras Store did a moderate amount of business during the year but at practically no profit. When it is considered, however, that one of its objects is to maintain the price of some food staples within the reach of the native employees in times of scarcity and that it pretty well succeeded in this during the past year, the desired aim has been attained.

There has been a readjustment of prices and some reorganization, therefore we look for a better showing during the coming year.

Expansion Projects.

Work on each of the various Expansion projects, discussed below, is done only on a scale which both the prospective outlook and the option time allotted warrants. Therefore, the most promising veins or deposits are preferably explored first, the lesser possibilities being left to receive attention later.

Each individual zone or prospect is in charge of a capable and experienced man with a fluent knowledge of Spanish and who can handle the labor successfully, and as there is a frequent inspection by members of the San Juancito staff also, intelligent, efficient and economical work is pretty well assured. Recently we have assigned an engineer whose sole duty it is to inspect this sort of work, check up the various operations, suggest new development, make his reports, etc., as well as look up any likely looking prospects offered either for sale or option. As the scope increases it is planned to place an additional engineer in the field.

Sabanagrande Mine.

Development at this Mine continued throughout the year 1916, the cost of same being 55,849 pesos. In our report of November 1st, 1916, you were advised that the ore resources of this Mine on that date stood at 7,900 tons, having a gross value of $277,157 U. S. C. Since then, the remaining two months of the year disclosed further ore pockets, the extent of which it will be one of the objects to develop during the coming year. The showing at Sabanagrande is such that a larger mining equipment was recommended as well as the erection of a suitable reduction works of around 30 to 40 tons daily capacity. You have approved these recommendations and already some of the mine equipment is on the way.

Tests of the ore indicate that a high percentage of its value can be recovered by the Oil Flotation Process, therefore it is very probable that this will be adopted in the proposed reduction works.

Last year's development demonstrated that the ore bodies extend to greater depth than was for a long time supposed and that in the work up to date the depth limit has not as yet been reached. During the coming year, therefore, the object will be to attain still greater depth on the ore as well as start new levels to develop its lateral extent.

The Mine already has sufficient ore developed so that under efficient and economical management it should pay its option obligations, total expenditures for development since option was taken to November 1st, 1916, an allowance of $60,000 U. S. C.

for Mine and Mill equipment, the cost of mining and milling the ore found up to November 1st, 1916, and $8,000 U. S. C. as interest on the investment.

Chile Mountains Prospecting Concession.

Location: About 20 miles east of San Juancito.

Area: About 1,000 square kilometers.

Prospecting was almost wholly confined to the Buena Vista section of the concession during the year, the expenditures over that period amounting to 37,871 pesos, and 76,666 pesos since prospecting on the concession first began.

While numerous veins were found, some of which carried encouraging value at the surface, subsequent development showed that this did not exist at depth. Sufficient work was done on a number of such veins at various elevations to clearly indicate that the chances for encountering ore in the district are exceedingly small, therefore towards the end of December all exploration work at Chile was permanently discontinued.

Guasucarán.

Location: Department of Tegucigalpa.

This property is also held under option and development during 1916 cost 12,990 pesos.

The situation at Guasucarán is about the same as at Santa Rosa de Potosí, namely: a cross-cut is being driven to penetrate what is known as the "Flat" vein. This cross-cut now lacks only a short distance to reach the desired point and what is disclosed there will definitely determine whether it is worth while continuing with the work or permanently discontinue it.

Santa Rosa De Potosí.

Location: Department of Choluteca.

This property is also held under option and 21,197 pesos were spent for its development during 1916. There are numerous veins of good width some of which in the past yielded ore at the surface, therefore the present object is to determine if this also

exists at depth and in paying quantities. Due to the topography most of the veins to be developed at depth can only be penetrated by cross-cuts through the barren rock and as none of these have as yet reached their objective not much more is known regarding the future possibilities of this mine than at this time last year.

Agencies.

The Agencies at Amapala, San Lorenzo, Tegucigalpa and Puerto Cortez all rendered satisfactory service throughout the year.

The Amapala Agent attends to all the incoming and outgoing freight and handles same to and from the mainland at San Lorenzo. The San Lorenzo Agent sees to its despatch to the Rosario works and Expansion projects, and while there has been a shortage of freighters there was no interruption whatsoever for the want of any material.

Mr. L. F. Valentine, the Agent at Tegucigalpa, looks after the Company's interests at that important place, taking care of municipal and governmental matters as they come up from time to time, our bank business also being handled through him as well as all other Agency business.

Very little business is done at Puerto Cortez, but we must have some one to receive constantly incoming employees and unless they can in the future all be sent via Amapala, the Puerto Cortez Agency is well warranted.

Financial.

The arrangement with the Banco de Comercio, of Tegucigalpa, whereby it handles all our drafts at the prevailing rate of exchange, has met with success and we do not now experience the difficulties of former times in placing exchange.

Government.

Most cordial relations existed during the year with all governmental departments, Rosario business always receiving prompt and courteous attention. The Chief Executive, His Excellency, Dr. Francisco Bertrand, under whose liberal and able administration the country has undergone marked progress, has proved

most kind and just. There is every reason to believe that the present cordial relations will continue to exist in the future and that, therefore, the Company can proceed with its great enterprise not only at San Juancito, but in other sections of the country as well, with the assurance that it has the Government's protection and support in all its legitimate undertakings.

Visit of Officers of the Company.

In the early part of the year we again had the pleasure of a visit from the Vice-President, Mr. J. M. DeHart. Mr. DeHart spent over three months going into all matters pertaining to not only the work at San Juancito, but visited all the Expansion projects as well. He has given us valuable suggestions as well as putting us in better touch with the desires of your office, all of which has resulted in material benefit to the Company.

Your staff always welcomes such visits and is most anxious to point out all matters of interest, discuss future plans and receive and carry out any instructions resulting therefrom.

Conclusion.

The year just closed has indeed been a record year. The largest tonnage crushed and the largest bullion production, attended by consistently lower costs than ever before in all departments, all established a record which we shall endeavor to maintain, if not surpass, during the coming year. In turning to the resources at our command for its accomplishment, we find the ore reserves ample, the remaining territory to be developed for their replenishment favorable, the Mill and other plants in good condition, therefore, provided world conditions in so far as they affect operations here, do not get worse than they have been, and no other unforeseen detrimental events occur, we have every reason to believe that our hopes for 1917 will be realized.

The high price of silver prevailing during the year just closed has also made it the most prosperous one in the history of the Company, and if silver continues to command the same high figure during the coming year there are good prospects that 1917 will be just as prosperous.

In closing, permit your staff to thank you for the whole-hearted support and co-operation it received during the year just closed, without which what has been accomplished, as briefly set forth in this report, would not have been possible.

Respectfully submitted,

A. R. GORDON,

General Manager.

Annex "A"

General Statement of Yearly Data.

NUMBER 1	YEAR 1916			YEAR 1915		
BASED ON	129,275 Tons Broken			121,590 Tons Broken		
MINING COSTS:	Pesos	Per Ft.	Per Ton	Pesos	Per Ft.	Per Ton
Development	214,465.76	16.97		227,395.67	17.46	
Timbering for same.....	11,752.01	.93		13,992.14	1.07	
Tramming for same.....	24,339.44	1.93		23,774.97	1.83	
	250,557.21	19.83		265,162.78	20.36	
Number of feet driven.....	12,637.50			13,000.50		
Cost of development per ton.....			1.94			2.18
		Per Ton			Per Ton	
Stoping	415,827.82	3.23		418,517.46	3.44	
Timbering for same.....	66,555.61	.51		59,308.82	.49	
Tramming for same.....	135,354.97	1.05		114,949.44	.95	
	617,738.40	4.79		592,775.72	4.88	
Cost of Stoping per ton.....			4.79			4.88
The cost of other operations, exclusive of Electric Haulage and Truck Maintenance, was	203,318.39		1.57	183,803.57		1.51
Total Cost of Breaking Ore.....	1,071,614.00		8.30	1,041,742.07		8.57
NUMBER 2						
BASED ON	128,030 Tons Crushed			117,790 Tons Crushed		
Labor	746,980.49		5.83	710,453.56		6.03
Supplies	345,354.96		2.70	344,133.83		2.92
Power	17,683.65		.14	18,449.97		.16
Total Mining Cost.....	1,110,019.10		8.67	1,073,037.36		9.11
Less: Adjustment in Broken Ore in Stopes Account, per President's letter 384	55,700.00		.44			
Less: Increase in Broken Ore in Stopes, December 31, 1915.....				17,400.00		.15
Net Mine Operating Cost.....	1,054,319.10		8.23	1,055,637.36		8.96
MILLING COSTS:		Per Ton			Per Ton	
Labor	121,754.86	.95		122,756.47	1.04	
Supplies	559,998.15	4.37		509,234.77	4.32	
Power	26,770.31	.21		27,542.12	.24	
Total	708,523.32	5.53		659,533.36	5.60	

SURFACE AND ADMINISTRATION COSTS:				
Labor	275,667.50	2.15	242,499.86	2.06
Supplies	30,449.19	.24	31,362.03	.27
	306,116.69	2.39	273,861.89	2.33
RECAPITULATION OF COSTS:				
Mine	1,054,319.10	8.23	1,055,637.36	8.96
Mill	708,523.32	5.53	659,533.36	5.60
Administration	306,116.69	2.39	273,861.89	2.33
Net Operating Cost	2,068,959.11	16.15	1,989,032.61	16.89
Increase Broken Ore in Stopes, Adjustment in Broken Ore in Stopes Account, per President's letter 384.	55,700.00		17,400.00	
Total Cost	2,124,659.11	16.15	2,006,432.61	16.89

REDUCTION WORKS: PRODUCTION:		Aver. Per Day		Aver. Per Day
Dry Tons Crushed	128,030 Tons	350.77	117,790 Tons	322.74
Ounces of Silver produced	1,810,885.95 Ozs.	4,961.33	1,748,803.48 Ozs.	4,791.72
Ounces of Gold produced	14,988.798 Ozs.	41.065	15,210.637 Ozs.	41.678
Value, Silver @ 50c; Gold @ $20.00.	$1,205,218.93	$3,301.96	$1,178,614.48	$3,229.40
Bars Doré Bullion	644		7	
Boxes Precipitates	569		1,325	

Actual Extraction by Bullion Plus Tails and Bullion.

EXTRACTION: MILL HEAD:		Percentage of Extraction	Average Per Ton		Percentage of Extraction	Average Per Ton
Total ounces Silver received	2,033,736.77	89.042	15.884 ozs.	1,999,652.15	87.45	16.976 ozs.
Total ounces Gold received	15,904.459	94.243	.1242 ozs.	16,475.666	92.32	.1400 ozs.
Total Value	$1,334,957.56	90.281	$10.426	$1,329,342.34	88.66	$11.288

REMARKS:						
Wet Tons delivered to Mill during Year		148,395.26			134,672.00	
Average % of Moisture	13.699	20,328.52		12.60	16,994.00	
Dry Tons		128,066.74			117,678.00	
Ore in Bin Jan. 1st, 1916	573.67		Jan. 1, 1915	.686		
Ore in Bin Dec. 31st, 1916	610.41	36.74 Increase	Dec. 31, 1915	.574	112.00 Decrease	
		128,030.00			117,790.00	
Average Rate of Exchange during Year		259 %			294 %	
Honduras Peso equal to about		39c. U. S. C.			34c. U. S. C.	

Annex "B"

Summary of Calculated Ore Reserves (at 13 cu. ft. per ton).

Veins	Av. Width Ft.	Tons of Ore	Tons of Ore and Waste	Per Cent. Waste	Total Value U.S.C.	Value at Mill U.S.C.
San Joaquin	1.2	13,151	27,399	52.0	$381,668	$13.93
Catalina	0.6	801	2,669	70.0	52,269	19.58
North	0.5	1,013	2,066	51.0	33,572	16.25
South West	1.4	3,500	5,000	30.0	75,000	15.00
South San Miguel	1.6	11,466	21,634	47.0	283,189	13.09
		29,931	58,768		$825,698	$14.05

Summary of Estimated Ore Reserves (at 13 cu. ft. per ton.)

Buena Ventura	4,000	36,000	9.00
Candelaria	15,000	135,000	9.00
Colonia	5,000	50,000	10.00
Capitana	2,000	24,000	12.00
North San Miguel-Concepcion	10,000	110,000	11.00
Esperanza	1,000	9,000	9.00
Guadalupe	3,000	21,000	7.00
Jucuara	4,250	55,250	13.00
Nueva	1,400	14,000	10.00
North West and Stringer	5,000	47,500	9.50
Rosario	32,000	240,000	7.50
Socorro	2,000	28,000	14.00
Crisanta	3,000	27,000	9.00
Stringers	3,000	30,000	10.00
West	8,000	76,000	9.50
Total	98,650	902,750	9.14

Broken Ore in Stopes. DECEMBER 31ST, 1916.

Totals by Veins.

	Tons
Rosario	2,959
San Joaquin	4,421
San Miguel	7,213
Guadalupe	753
Socorro	2,895
Colonia	1,077
Capitana	2,740
North West	1,909
Candelaria	1,968
Crisanta	1,152
Esperanza	757
Buena Ventura	881
Grand Total	28,725

Summary.

Calculated Ore	58,768	825,698	14.05
Estimated Ore	98,650	902,750	9.14
Estimated Fills	126,000	955,000	7.58
Broken Ore in Stopes	28,725	287,250	10.00
Total	312,143	$2,970,698	9.51

Annex "C"

Vein	1916 Reserve	1916 Production	Left for 1917	Broken Ore in Stopes 1916	1917
Buena Ventura	4,000	5,134	....	315	881
Candelaria	15,000	5,838	9,162	5,069	1.968
Catalina	2,719	50	2,669	....	....
Colonia	5,000	8,455	....	4,565	1,077
Culebra	1,656	799	857	....	....
Capitana	8,710	8,979	....	3,870	2,740
Esperanza	2,000	1,151	849	197	757
Guadalupe	9,500	3,003	6,497	....	753
Jucuara	8,830	1,342	7,488	127	....
Nueva	2,000	636	1,364	....	....
North	2,066	....	2,066	....	....
North West	4,000	2,013	1,987	1,425	1,909
Rosario	45,000	11,715	33,285	979	2,959
Socorro	3,887	3,258	629	1,574	2,895
South West	9,400	4,009	5,391	113	....
San Joaquín	40,710	11,304	29,406	2,414	4,421
San Miguel-Concepción	19,758	10,250	9,508	6,832	7.213
Stringers, Crisanta	5,000	1,710	3,290	....	1,152
West	10,000	1,867	8,133	....	....
Total	199,236	81,513	122,581	27,480	28,725 tons

Stope Fills.

Guadalupe	25,000	8,123	16,877	....	....
West	50,000	11,906	38,044	....	....
Rosario	15,000	3,092	11,908	....	....
Buena Ventura	7,000	7,019	....	....	....
North West	7,000	9,402	....	....	....
Candelaria	8,000	....	8,000	....	....
Nueva	5,000	504	4,496	....	....
Total	117,000	40,046	79,325		

Development.

Development Ore from various veins	....	6,471	....	....	....
Grand Total	316,236	128,030	201,906		

Annex "D"

Development for Year—1916.

Veins	Drifts	Raises	Cross Cuts	Shafts	Totals
San Miguel	1,270	553	193		2,016 feet
Capitana	253				253 "
Jucuara	134			28	162 "
South West	245	33.5	1,326		1,604.5 "
San Vicente		22.5			22.5 "
Candelaria	61				61 "
Rosario	1,321.5	308			1,629.5 "
Guadalupe	1,068.5	57	66.5		1,192 "
Buena Ventura	1,350.5	133			1,483.5 "
North West	95	5.5	8		108.5 "
West	319.5	112.5			432 "
San Joaquín	1,329	362			1,691 "
Nuevo		13			13 "
Colonia	24		334		358 "
Esperanza	440.5	6.5	598.5		1,045.5 "
Crisanta	130				130 "
Catalina		61			61 "
Culebra	357		20	4.5	381.5 "
Concepción	93				93 "
Totals	8,491.5	1,667.5	2,546	32.5	12,637.5 "

Annex "E"

Vein Production—1916.

Dry Tons.

Veins	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Totals
San Miguel	962	443	788	775	516	643	814	1,002	910	1,009	1,130	1,258	10,250
Capitana	927	892	1,294	935	1,015	868	520	615	513	396	536	468	8,979
South West		232	357	326	384	342	346	400	406	428	401	387	4,009
Candelaria	505	625	622	572	540	350	348	326	596	459	451	444	5,838
Rosario	431	753	895	969	1,421	1,106	971	981	1,014	991	1,186	997	11,715
Buena Ventura	272	320	454	438	542	673	513	264	359	251	642	406	5,134
North West	539	405	99	5	4		76	57	105	133	62	528	2,013
San Joaquín	582	641	728	1,191	1,152	635	885	765	1,134	1,002	1,190	1,399	11,304
Nueva	140	208	269		19								636
Colonia	388	439	1,036	1,338	1,091	577	908	908	456	552	446	316	8,455
Esperanza	73	43	53	90	181	172	105	143	84	94	43	70	1,151
Jucuara	287	76	72	124	213	164	107	40	58	57	31	113	1,342
Socorro	256	483	445	135	72	121	229	228	91	331	268	599	3,258
Crisanta							137	354	428	284	355	152	1,710
Guadalupe	179	168	320	345	514	279	333	413	248	204			3,003
Catalina						19	25			6			50
Culebra							166	142	99	106	126	160	799
West		61	11	62	82	84	146	71	256	400	392	302	1,867
Ore from development	371	731	613	336	597	714	769	694	367	519	378	382	6,471
Totals	5,912	6,520	8,056	7,641	8,343	6,747	7,398	7,403	7,124	7,222	7,637	7,981	87,984

Average car capacity, .57 tons.

Annex "F"

Fill Production—1916.

Dry Tons.

Veins	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Totals
Guadalupe	634	563	457	334	252	485	1,107	944	542	966	751	1,088	8,123
Rosario	316	400	408	286	221	323	243			78	374	443	3,092
West	1,553	1,252	898	853	917	1,215	882	936	833	972	631	964	11,906
North West	782	525	471	550	748	828	915	957	752	1,307	729	838	9,402
Buena Ventura	939	916	880	370	418	707	455	476	877	523	211	247	7,019
Nueva					101	121	40		44	42	117	39	504
Monthly Totals ...	4,224	3,656	3,114	2,393	2,657	3,679	3,642	3,313	3,048	3,888	2,813	3,619	40,046

Total Fill Production

Summary.

Total Vein Production	87,984	dry tons
Total Fill Production	40,046	" "
Grand Total Production.....	128,030	" "

NEW YORK, January 1st, 1917.

To the President and Board of Directors of the New York & Honduras Rosario Mining Company.

GENTLEMEN:

In placing before you the financial figures of the year just concluded, it is a great satisfaction to be able to say that these will be found the most favorable in the entire history of the Company.

The Smelters returned 1,807,638 ounces fine silver, and 14,977 ounces fine gold, applying to the 128,030 tons of ore treated.

Settlements received amounted to $1,553,114.86. From miscellaneous sources an additional amount of $13,058 was received, making total income $1,566,172.86.

The deductions from this income and how applied are detailed in the income statement which, together with the Balance Sheet as of December 31st, 1916, prepared by the Security Audit Company, are presented herewith, and form part of this report.

There were 57,777 ozs. silver more and 255 ozs. gold less produced in 1916 than in 1915. Due to the higher prevailing price of silver during the year (the year's average of 1915 was 49.68 cents, and 1916, 65.66 cents) the income from bullion exceeded the previous year's results by $361,354.16. Four quarterly dividends were paid, of 3 per cent. each, and an extra 2 per cent. each, making a total of 20 per cent. on the capital stock, and amounting to $400,000, the largest amount distributed to the stockholders in any one year.

Since the beginning of your enterprise in 1880, there has been produced silver and gold amounting to $22,726,081.94 in value. Since 1887, when the first dividend was paid, there has been distributed to the stockholders a total of $4,190,000.

Respectfully submitted,

ERNEST SCHERNIKOW, Treasurer.

New York & Honduras Rosario Mining Company.

Income Statement for the Year Ended December 31, 1916.

INCOME.

Production of Silver and Gold	$1,553,114.86
Miscellaneous Income	13,058.00
Total Income	$1,566,172.86

DEDUCTIONS.

Operating Expenses, Freight and Expenses on Bullion and Expansion Expenses		$900,541.07	
New York Administration Expenses:			
Salaries	$36,018.64		
Directors' Fees	5,860.00		
Rent of Office	3,300.00		
Cables, Telegrams and Postage	757.41		
Stationery	1,836.92		
Legal Fees	167.80		
Stock Transfer	472.25		
General Expenses	6,058.06	54,471.08	
Sundry Charges:			
Visit of Second Vice-President and Assistant to Mines	2,063.70		
Taxes, including provision for 1916 Federal Income Tax	12,111.06		
Interest	892.84	15,067.60	970,079.75
Net Income subject to charges to provide for Reserves as shown below			$596,093.11
Set aside to Reserve for:			
Depreciation		54,727.61	
Depletion		77,655.74	
Fire Insurance		3,600.00	135,983.35
Net income for year carried to Surplus			$460,109.76

New York & Honduras Rosario Mining Company.
Balance Sheet, December 31, 1916.

ASSETS.

Property Accounts:			
Cost of Mine, Real Estate and Concessions.		$1,500,000.00	
Property at Amapala and San Lorenzo.....		16,515.00	
Reduction Works, Power Plants, Electric Hauling System, Mining Machinery and other Improvements in Honduras, Less Depreciation		781,951.69	
Live Stock		7,093.40	
New York Office Furniture.....		2,883.84	$2,308.443.93
Current and Working Assets:			
Bullion in Transit.....		353,115.91	
Cash in New York.....		85,514.62	
Accounts Receivable		66,497.92	
Supplies Afloat		689.86	
Active Assets in San Juancito:			
Cash and Cash Items, Net..	$166,578.66		
Ore in Mill Bin.....	3,573.22		
Broken Ore in Stopes.....	119,300.00		
Inventories:			
General Supplies	$266,816.61		
Hotel Commissariat	5,302.03		
Store	27,952.15	300,070.79	
		589,522.67	1,095,340.98
Fire Insurance Fund.....			7,367.85
Sundry Investments			103,521.12
			$3,514,673.88

LIABILITIES AND CAPITAL.

Drafts and Accounts Payable, including Federal Income Tax for 1916 not yet due.....			$ 257,498.89
Capital Stock			2,000,000.00
Reserves:			
For Depletion		$ 199,187.62	
For Fire Insurance.....		7,367.85	206,555.47
Surplus:			
Balance January 1, 1916.....		$990,509.76	
Add Net Income for year ended December 31, 1916		460,109.76	
		$1,450,619.52	
Deduct Dividends paid during year.....		400,000.00	1,050,619.52
			$3,514,673.88

AUDITOR'S CERTIFICATE.

We have audited the books of account of New York & Honduras Rosario Mining Company, kept at its office in New York, and we certify that the above Balance Sheet in our opinion is properly drawn up so as to show the true financial position of the said company on December 31, 1916.

THE SECURITY AUDIT CO. OF NEW YORK,
GEO. WEAVER, *Vice-President.*

New York, March 14, 1917.

Table Showing

Bullion Production.		Dividends Paid.		
1882	$ 2,452.27			
1883	12,900.42			
1884	149,741.39			
1885	244,444.70			
1886	224,157.58			
1887	613,446.05	1887 No. 1	$ 37,500—	2½%
1888	767,632.15	1888 Nos. 2 to 5	60,000—	4 %
1889	590,189.55	1889 Nos. 6 to 14	150,000—10	%
1890	113.28			
1891	369,587.19	1891 Nos. 15 to 16	30,000— 2	%
1892	614,498.67	1892 Nos. 17 to 21	165,000—11	%
1893	492,534.87	1893 Nos. 22 to 25	150,000—10	%
1894	392,485.92	1894 No. 26	37,500— 2½	%
1895	158,164.42			
1896	449,525.83	1896 Nos. 27 to 28	30,000— 2	%
1897	568,872.06	1897 Nos. 29 to 40	180,000—12	%
1898	611,467.76	1898 Nos. 41 to 48	120,000— 8	%
1899	798,994.77	1899 Nos. 49 to 60	180,000—12	%
1900	827,443.12	1900 Nos. 61 to 75	225,000—15	%
1901	780,760.18	1901 Nos. 76 to 93	300,000—20	%
1902	490,273.34	1902 Nos. 94 to 100	105,000— 7	%
1903	436,818.29	1903 No. 101	15,000— 1	%
1904	721,374.87	1904 Nos. 102 to 108	105,000— 7	%
1905	993,065.39	1905 Nos. 109 to 121	180,000—12	%
1906	1,112,171.69	1906 Nos. 122 to 139	285,000—19	%
1907	791,347.62	1907 Nos. 140 to 153	210,000—14	%
1908	788,910.23	1908 Nos. 154 to 165	180,000—12	%
1909—10 months	636,500.00	1909 Nos. 166 to 173	120,000— 8	%
1910	890,700.00	1910 Nos. 174 to 180	105,000— 7	%
1911	887,169.59	1911 Nos. 181 to 182	90,000— 6	%
1912	944,212.67	1912 No. 183	30,000— 1½	%
1912-13—12 months	1,051,273.28			
1913—last 3 months	328,100.05	1913 Nos. 184 to 188	220,000—11	%
1914	1,239,877.13	1914 Nos. 189 to 193	240,000—12	%
1915	1,191,760.70	1915 Nos. 194 to 197	240,000—12	%
1916	1,553,114.86	1916 Nos. 198 to 205	400,000—20	%
Total	$22,726,081.94	Total	$4,190,000	

Dividends 1 to 182 inclusive, on Capital Stock $1,500,000.00
Dividends 183 to 205 inclusive, on Capital Stock 2,000,000.00

New York, January 1, 1917.

To the President and Board of Directors:

From the preceding reports the progress made during the year just closed will have been observed. In a great measure Mother Nature has aided materially thereto, because she gave an abundance of rain which supplied sufficient power at all times to permit the continuous operation of your works. Not only has this abundance of rain been beneficial to this Company, but it has proved a blessing to Honduras in general, because during the year 1915, due to the drought and consequent failure of crops, you found it imperative to import large quantities of corn, rice, beans, flour, etc., whereas in the past year this was not necessary.

One condition, however, that was encountered and that assumed a serious aspect, was the question of supplies. There were times when it seemed impossible to secure materials so vitally needed in your operations, but, fortunately, by impressing upon the suppliers the seriousness of the situation, their response has been most generous. Thus we entertain every hope that the works will continue to operate uninterruptedly.

A feature that has been instrumental in insuring prompter deliveries of supplies to your works, is the new direct steamship service inaugurated last October between New York and ports on the West Coast of Central America through the Panama Canal. This service offers a steamer every three weeks, and where heretofore it was necessary to transship at Panama, supplies are now carried directly through the Canal and up the West Coast of Central America to Amapala, the port of entry in Honduras, thus obviating the delays encountered due to uncertain steamer connections, and the serious breakage by handling.

In order to appreciate the quantities of machinery and parts, chemicals, hardware, foodstuffs, etc., required for the works, it is only necessary to consider the following: There were shipped during the past year from New York and San Francisco a total of 23,375 packages, weighing in the neighborhood of 1,450 tons. This necessarily entailed considerable work and detail, such as the making up of Consular Invoices, in Spanish, Custom House

manifests, Specifications showing each package, its net and gross weights, exact contents and value, etc., etc., to accompany each shipment, all of which was handled by a competent office force and kept strictly up-to-date.

Respectfully submitted,

J. PERLMAN,

Assistant Secretary.

REPORT

OF

NEW YORK & HONDURAS ROSARIO MINING COMPANY

1917

NEW YORK, JANUARY 1st, 1918.

BOARD OF DIRECTORS 1918-1919

SIDNEY ABBEY,
LEWIS L. CLARKE,
H. A. GUESS,
I. HEIDELL,
W. C. LANGLEY,
J. C. F. JACOBY,
W. L. SAUNDERS,
M. F. SOTO,
AMBROSE G. TODD,
W. S. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1918-1919

LEWIS L. CLARKE, *Chairman.*
W. C. LANGLEY,
H. A. GUESS,
W. L. SAUNDERS,
AMBROSE G. TODD.

OFFICERS 1918-1919

W. S. VALENTINE, *President.*
SIDNEY ABBEY, *Vice-President.*
J. M. DeHART, *2nd Vice-President.*
ERNEST SCHERNIKOW, *Treasurer.*
J. PERLMAN, *Secretary.*

Report of the Board of Directors of the New York & Honduras Rosario Mining Company.

NEW YORK, January 1, 1918.

To the Stockholders:

The year just closed has been one of great upheaval all over the World. It marked the entrance of our Country into the Great War—and with it came great national and international complications for shipping, great rise in cost of raw materials, foodstuffs, as also a scarcity of machinery, chemicals and explosives, not to mention the restrictions of embargo, license and conservation regulations. Your Company has co-operated in every way with the Government to further its wishes and interests.

It is with pleasure that your Board of Directors presents this Thirty-seventh Annual Report with the comment that the year has yielded results practically as favorable as the previous one, its banner year.

Dividends.

In 1917 *the Stockholders received* $300,000 *dividends;* $100,000 *was distributed from the Depletion Reserve account, equalling in cash the* 20% *on the Capital Stock paid in* 1916. *Your working assets have again been increased.*

Amortization.

In accordance with conservative custom adopted by mining companies your Board deemed it wise to reflect in its books in some measure the fact that its ore reserves must be looked upon as a wasting asset growing less each operating day and replaceable only by the discovery of new veins or the acquisition of new property.

Your attention is called to items in the Company's balance sheet bearing on Mineral Ore Reserves and Reserve for Depletion. The establishment of these has been made advisable because of recent changes in the Federal and other Corporation tax laws, whereby mining companies are allowed to compute depletion deductions from gross income on the basis of a fair market value

of the mine content as of March 1, 1913. Congress has apparently recognized the principle that earnings of mines are chiefly derived from exhaustions of the mine property in which the capital has been invested.

For this a "Reserve for Depletion" has been established to provide funds out of which to acquire new property or else to return to the Stockholders the value of the Capital invested in its business. Your Board has carefully estimated the life of the Mine, its annual production, its capital value, etc., and has fixed upon a certain per ton charge to Profit and Loss Surplus, to be credited to this Reserve every year. Based upon an estimated value as of March 1, 1913, for the Ore Reserves then on hand it was directed that for each ton crushed an allowance should be made in this Reserve Account, and the Balance Sheet submitted herein should be read with this in mind.

Production.

The year's work yielded net 1,668,648 ounces fine silver and 13,771 ounces fine gold, of a total value of $1,674,193.80.

Silver.

Silver has fluctuated widely between .60 and 1.09 during the year, due no doubt to the great demand from the Belligerent Countries for coinage in substitution of the large amounts of locked up gold by all nations of the world, as also the heavy demand for the metal from the orient. This demand, it seems reasonable to suppose, will continue.

In 1915 we received an average of .512 per ounce for silver.

In 1916 we received an average of .698 per ounce for silver.

In 1917 we received an average of .841 per ounce for silver. The price of silver it is expected will soon be fixed by our Government in accord with the Allied Governments at considerable above our 1917 average.

Naturally, a great part of this benefit was lost through the increased cost of supplies, higher shipping and insurance charges, more difficult and uncertain factory labor conditions, requiring unusual expenditure for surveillance, superintendence, travel and management.

The Mine.

The General Manager's report herewith appended gives very interesting details.

The Mine furnished 125,900 *dry tons to the Mill of an average value of* $9.21 *per ton against* $9.51 *the year before; nevertheless, we have on hand an "Ore Reserve" of* 303,296 *tons, being only* 8,847 *tons less than a year ago, as shown by the General Manager's report.*

Development work was more difficult owing to the changes and substitutions that came about through the enlistment and draft of some of our experienced underground workers, engineers and bosses. Yet we drove 10,496 *feet and also came very near finishing the* 3,000 *feet South West Cross-cut from which your Board has such high hopes for economic results.*

The Mill.

The interruption during the year amounted to only a few days, merely enough to allow for necessary examination and repairs. All the machinery has stood the test of capacity crushing, proving again the high efficiency of the staff employed in this department.

Fortunately the year's rainfall was again copious and no shutdowns of consequence interrupted production.

Expansion.

This work has continued steadily—with a few encouraging prospects located up to date. The machinery for the New Mill at Sabana Grande is all in Honduras and should be in operation during 1918.

Financial.

The Company has been able to keep its working assets, as will be seen in the Balance Sheet herewith submitted, at a slightly higher figure than ever before in spite of the year's burdens and generous reservations. Your Company has invested in Liberty Bonds, established a larger Cash Balance in Honduras than ever held before.

Management.

During the six months' vacation of your General Manager, Mr. A. R. Gordon, E. M., the mine was in charge of the Mine Superintendent, Mr. L. F. Pearce, E. M., who, together with the Local Secretary, Mr. M. F. Soto, showed splendid ability throughout and conducted all the affairs in a very satisfactory manner. The willing and able staff at the Mine co-operated in every way and met the year's trials with cheery good will for which they deserve full credit.

New Directors.

During the year you were fortunate enough to have Mr. W. L. Saunders, member of the Federal Reserve Board, Chairman of the Board of the Ingersoll-Rand Co., as well as Mr. W. C. Langley, senior member of W. C. Langley & Co., seated on the Board of Directors.

Conservation.

In line with the injunction of our Government to conserve all kinds of material, this Company in its far off works has entered the ranks of conservationists and is pleased to state that its entire staff has co-operated whole heartedly. Wheatless and meatless days have been established, vegetable gardens created to take the place of canned vegetables heretofore shipped, and corn mills are now being shipped to grind native corn in substitution of wheat flour heretofore imported.

In further order of conservation of steel and iron, the scrap heap is being overhauled and all scrap that can be employed even as a "make shift" is being used.

Government.

The year has brought up many difficult and annoying international problems but for the solution of these your officers always felt that the Honduranean Government was only too willing to lend a helping hand to our Government and to our Company with a view to keeping up the commercial activities between the two countries and not allowing the world war to cut off the flow of food and supplies so necessary to the smaller Cen-

tral American Republics. The President of Honduras, Dr. F. Bertrand, his Cabinet and the authorities in general have been most generous in interpreting liberally the laws, the embargoes and the licensing made necessary to control shipments, and your Board of Directors wishes here to record its thanks to both Governments for their recognition of the endeavors of this Company in its co-operation, even in a small way, in carrying out their policies.

Respectfully submitted,

W. S. VALENTINE,

President.

San Juancito, Honduras, C. A., January 1, 1918.

To The President:

New York, N. Y.

Dear Sir:

The following is a report of all work performed on this Company's properties in Honduras during the fiscal year ending December 31, 1917, and is respectfully submitted for your consideration.

We have followed more or less the same form in which the 1916 report was submitted and believe it should make the present one clearer and of quicker interpretation, particularly when comparison is desired.

Production.

	1917	1916
Dry Tons Crushed	125,900	128,030
Ounces Silver Produced	1,670,612	1,810,886
Ounces Gold Produced	13,790	14,989
Value U. S. Currency: Silver, 50c., Gold, $20.00 per oz.	$1,111,112	$1,205,219
Decrease	$ 94,107	

The above product consisted of 134 boxes of cyanide precipitates averaging 838 silver, 7.16 gold fine and 953 bars Doré bullion averaging 971 silver, 7.99 gold fine, all of which was shipped to New York.

The high price of silver prevailing during the year, coupled with lower operating costs and exchange rate, has permitted the profitable treatment of ores considered too low in grade under conditions existing some years ago. Therefore, while the total

bullion content for 1917 as compared with the year 1916 was lower by over 140,000 ounces silver and 1,199 ounces gold the market returns have been greater than ever before.

The ore reserves are more than ample to supply the Mill with full tonnage of profitable ore during the coming year, 1918, and if the necessary materials continue to come forward as they have during 1917 we anticipate about the same or better production during 1918 as that for the year just closed.

Total Operating Costs.

We attach herewith the customary Annex "A" which shows at a glance the details of production and operating costs of all principal departments as compared with the previous year, 1916.

Resumé of Total Operating Costs (in Pesos).

			(Cost per ton)	
	1917	1916	1917	1916
Tonnage Milled Basis.....	125,900	128,030		
Mining	1,049,163	1,054,319	8.33	8.23
Milling	713,570	708,523	5.67	5.53
Administration	288,160	306,117	2.29	2.39
Total	2,050,893	2,068,959	16.29	16.15
Decrease	18,066			
Increase			.14	
Value of peso in U. S. Cy ..	46c	39c		
Average rate of exchange. .	219	259		
Cost per ton in U. S. Cy....	$7.43	$6.30		

From the above statement you will note that the rate of exchange plays a very important part in the costs because while on the peso basis the cost per ton as compared with 1916 was only 14 centavos higher, reduced to a gold basis it was increased by as much as $1.13 per ton.

As is well known there is a constant increase in the cost of supplies due to the world war, and some articles have been quite difficult to obtain irrespective of price. Your staff has therefore exercised every means to economize and substitute, and generally to offset this higher supply cost by decreasing the labor cost. In this, gratifying success has been attained and in making comparison with the previous year, 1916, we show that while the total

supply cost in 1917 was 26,264 pesos more, the labor cost was 122,785 pesos less, making a net saving between these two items of 96,521 pesos. These figures deal only with labor and supplies actually used in the Mine, Mill and Administration Departments to treat the tonnages for the two years compared.

Our aim will be to pursue the same policy during the coming year, as long as this is consistent with good mining and milling practice and if it in no way jeopardizes the future of either the mine or mill.

THE MINE.

Ore Reserves.

The total ore reserves existing on January 1st, 1918, and shown in detail on Annex "B" are given in the following summary.

In all calculations and estimates silver is taken at 50c per ounce and gold at $20.00 U. S. C. per ounce.

Summary.

	Tons of Ore and Waste	Total Value U.S.C.	Value per ton at Mill U.S.C.
Calculated ore in place at 13 cu. ft. per ton	92,653	$1,083,509	$11.69
Broken ore in stopes at 21 cu. ft. per ton	29,243	263,187	9.00
Estimated ore in place at 13 cu. ft. per ton	81,400	726,000	8.92
Vein fills in place at 17 cu. ft. per ton	100,000	720,000	7.20
Total	303,296	$2,792,696 Av'ge.	$9.21

NOTE: Above is calculated on a mining width of 3.5 ft., but the calculated tonnage is reduced by 20% to allow for poor sections, pillars, etc. Also, assay value used above has been reduced 20% due to high assays.

It is extremely pleasant for us to be able to present this year's reserve figures to you, which when compared with those of last year show only a falling off of 8,847 tons and $178,000 in value and this, although 125,900 tons, having a gross value of $1,239,302, were produced during the year just closed.

By examining Annex "B" you will note that the South San Miguel vein has been the largest single factor in increasing the reserve, both in tonnage and value. The tonnage estimates of both ore and fill of a majority of the other veins have also been raised, but in many instances where the tonnage estimate was increased the value per ton was decreased, which is but natural when it is remembered that old workings and well developed veins, with little future, are dealt with.

This year's total reserves average $9.21 per ton while those of last year averaged $9.51, showing a decrease per ton of only 30c. But while last year's reserves averaged $9.51 the ore actually milled during 1917 went $9.84 per ton or 33c more, which indicates that there has been no over-valuation. We believe the same degree of accuracy exists in this year's reserves. It is possible that a higher silver market in 1918 may make it advisable to drop the grade somewhat below the reserve average of $9.21, and in that case the rate of mining of stope fills and from the poorer veins would be increased.

Annex "C" is gotten up for the purpose of showing that while 72% of the ore reserve for 1917 was only estimated, the production from each vein during that year indicates that such estimate was substantially correct for all practical purposes. We have been guided by the same principles and have endeavored to obtain the same degree of accuracy in making the ore estimates for 1918, and while of course the personal equation must enter into such a method in a very large measure, your staff, being with you now a number of years, is certainly as well acquainted with the mine conditions today as it was a year ago, so it can safely be assumed that the estimates presented herewith are correct.

The longitudinal sections of each vein, with 5 ft. assay intervals throughout in the newer veins, and wherever these could be taken in the older ones, are submitted herewith. On each is shown the work done during the year and other data, which should prove not only of interest, but also a guide in further illustrating the various remarks on the Mine.

Summary of Calculated Ore Reserves (At 13 cu. ft. per ton).

	Tons of Ore and Waste	Total Value U.S.C.	Value per ton at Mill U.S.C.
Calculated ore	92,653	$1,083,509	$11.69
Estimated ore	81,400	726,000	8.92
Estimated fills	100,000	720,000	7.20
Broken ore in stopes (at 21 cu. ft. per ton)	29,243	263,187	9.00
Total	303,296	$2,792,696	Av'ge. $9.21

Ore Reserves.

Vein.	1917 Reserve (Including Broken Ore in stopes)	1917 Production (Including Broken Ore in Stopes)	Tons Left for 1918 (Exclusive of New Reserves)	Tons Produced in Excess of Total 1917 Reserve
Total	186,143	112,295	83,998	10,150

Stope Fills.

Candelaria	10,000	471	9,529
Guadalupe	20,000	7,937	12,063
Rosario	15,000	2,755	12,245
Buena Ventura	10,000	6,255	3,745
North West	10,000	5,509	4,491
West	53,000	12,757	40,243
Nueva	8,000	2,918	5,082
Total	126,000	38,602	87,398

Development.

Development ore from various veins		4,246		
Grand Total	312,143	155,143	171,356	10,150

Development.

On Annex "D" we present a detailed distribution of development in various sections of the mine. 9,380.5 feet were driven in 1917 while during 1916 the footage was 12,637.5 feet, showing a decrease of 3,257.0 feet. This marked decrease, however, should not be looked upon as indicative of less attention being given by your staff to this very vital branch of operation. We have always taken the standpoint that the sole object of development is ore, therefore, the amount of footage made during any period is no criterion as it is entirely guided by conditions which change daily.

While there has been a decrease in development in solid ground, 1,115.5 feet of old workings were recovered and as the purpose of this work is the discovery of fill material it can quite correctly be considered development also.

Taking the two together the total development for 1917 therefore amounted to 10,496 ft.

	Cost per foot (pesos) 1917	1916
Development	19.93	16.97
Timbering for same	2.46	.93
Tramming for same	2.03	1.93
Cost per foot	24.42	19.83
Cost per ton ore mined	1.75	1.94

It will be noted that the cost per foot is 4.59 pesos more than in 1916, but this year the item of 2.46 pesos includes about 75% of the expenditures made for the 1,115.5 feet of older workings recovered, therefore the actual cost per foot is reduced to 22.58 pesos per foot.

Ore Production.

We show on Annexes "E" and "F" herewith the production of ore and fill material, respectively.

The following is a summary of both annexes, comparison being made with the previous year, 1916:

	1917	1916
Ore broken from veins	83,052 tons	81,513 tons
Ore from development of veins	4,246 "	6,471 "
Stope Fill material	38,602 "	40,046 "
Total produced and milled	125,900 "	128,030 "
Percentage of fill	30.7	31.2
Number of producing veins	17	18

The largest ore producer during 1917 was the North San Miguel vein, its output being 16,625 tons while the West vein gave the largest amount of fill material, this being 12,757 tons. The greatest amount of both ore and fill from one vein was 18,157 tons and this came from the West vein.

Development for Year 1917.

Drifts	Raises	Cross-Cuts	Shafts	Total
5,745.5	740.5	2,873.5	21	9,380.5 feet

Old Workings Recovered.

Total ..... 1,115.5 feet

Vein Production—1917.

Dry Tons.

Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total
8,240	6,558	8,110	6,760	5,775	7,510	7,705	7,201	7,586	7,175	7,060	7,618	87,298

Average car capacity, .56 tons.

Fill Production—1917.

Dry Tons.

Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total
2,760	3,542	2,190	2,140	2,325	2,490	3,295	4,299	3,414	4,125	4,140	3,882	38,602

Summary.

Total vein production	87,298	dry tons
Total fill production	38,602	" "
Grand Total Production	125,900	" "

Stoping Costs (Pesos).

	1917	1916	1917	1916
Based on tonnage stoped	130,973	129,275	...	...
	Total Costs		Per Ton	
Stoping	419,929	415,828	3.20	3.23
Timbering for same	62,567	66,555	.48	.51
Tramming for same	119,955	135,355	.92	1.05
Total	602,451	617,738	4.60	4.79
Decrease	15,287	.....	.19	...

The ratio between the very cheaply mined fill and the much more expensively mined ore being about the same for the year just closed as for the year previous, the decrease of 19 centavos per ton is a satisfactory one. With the same general conditions prevailing during the coming year we do not believe there should be any increase in the per ton costs and it is possible there may be some further reduction.

Other charges which in 1917 amounted to 1.35 pesos per ton and in 1916 1.57 pesos per ton, are not included in the costs shown above. These charges consist of superintendence, engineering, assaying and other indirect items.

Total Mining Costs (Pesos).

	1917	1916	1917	1916
Based on tonnage milled	125,900	128,030	...	...
	Total Costs		Per Ton	
Labor	660,976	746,980	5.25	5.83
Supplies	362,573	345,355	2.88	2.70
Power	25,614	17,684	.20	.14
Total	1,049,163	1,110,019	8.33	8.67
Less Adjustment				
Broken Ore in Stope Account	.....	55,700	...	.44
Decreased tonnage	2,130 tons			
Decrease in total costs	5,156 pesos			
Increase in cost per ton	.10 "			

These costs represent all expenditures made to supply 125,900 tons of ore to the mill in 1917 and include development and all other cost items at the mine. That the cost per ton has not risen over 10 centavos is due, a good deal, to a marked decrease in the labor item, as both the Supply and Power items are higher.

Veins.

The operations carried on in each vein, during the past year, are discussed under their respective headings here below, and the plans and longitudinal sections of each vein submitted herewith should further amplify the various descriptions.

South San Miguel Vein.

Development of this vein during the past year amounted to 3,589 feet, representing over one-third of the total footage made in the whole mine over the same period. Its results are certainly most gratifying as is amply evidenced by the substantial ore reserve of 68,110 tons of milling ore valued at $11.59 per ton and having a total value of $789,543.

The vein was found at the Upper 550 and Peña Blanca levels, during the year, and the subsequent development has yielded satisfactory results. Some work was done also at the Upper 700 Level, on what appears to be the San Miguel, but, while there is evidence of ore, the vein does not line up with that on the levels immediately below. Indeed, one of the characteristics of the South San Miguel vein is that it divides into two or more separate veins, which, at some levels, show a tendency of again coming together, and, in one or two instances, some of the levels are on different veins. Due to this and to looser ground than in the North San Miguel, it is possible that we will not be able to mine the ore as clean, but allowance was made for this when the reserve was calculated, the stoping width being increased from 3 ft. in 1917 to 3.5 ft. for 1918, which naturally raises the waste percentage somewhat.

A cross-cut, commencing in Block 48, driven many years ago at the Lower 200 ft. Level to look for what was then supposed to be the lost Rosario vein has been recovered and work will soon be started to locate the South San Miguel. The distance to be driven is approximately 200 ft., and we have every reason to believe that not only the vein but ore also should be found. There is very good ore at the Peña Blanca Level, and considering the distance between this level and the Lower 200, the possibilities for a very large tonnage are there.

Although this vein has come up to all expectations expressed in last year's report, we believe that development during the coming year will also be successful, therefore we look for a further important increase in the ore reserve.

The ore production during 1917 was 4,194 tons, which came mostly from the Upper 250 ft. Level.

North San Miguel—Concepcion Vein.

The San Miguel North was the largest producer during the year, its output being 16,625 tons. The stopes from which the majority of the ore came are above the 550 ft. level and one of them has now passed considerably above the 900 ft. level (see map.) Some good stoping ground still remains north of the stopes referred to, and during the coming year arrangements will be made so that the ore can be mined. The production during 1917 greatly exceeded the reserve for that year, which was 10,000 tons, but in spite of this the outlook is such that we again estimate 10,000 tons.

The Concepción, which is really the continuation of the San Miguel North, produced no ore during the year. Development to the north, however, is being done at the Lower 400 ft. Level off the San Joaquin and while no high grade ore is expected, there is good reason to believe that some will be found which it will pay to stope. There is also the possibility of encountering cross stringers or veins.

Esperanza Vein.

Although some drifting was done in the vein during the past year, very little ore has been found. The production amounted to one-half of the reserve, the ore containing a good deal of waste, due to lack of uniformity of width of the vein. The ore reserve shown for the coming year is still at 1,000 tons and the majority in a block of ground in the floor of the Peña Blanca level directly below the stopes.

Rosario Vein.

This vein was second as an ore producer during the past year, the bulk of the ore coming from above the Peña Blanca level, between blocks 42 and 30. An important quantity also

was mined at the L. 100 level, in the vicinity of block 35. What is known as the "New York" mine was also a small but steady producer, its ore all going to the emergency reserve for the Mill located in stope block 8 at the Lower 650 or Rosario Level.

Most of the development work done was in a branch vein at and above the Peña Blanca level and some very good ore has been disclosed and partly stoped. There are sections below the Peña Blanca level between blocks 42 and 38 which have good possibilities and efforts will be made to enter them during the coming year.

From ore reserve figures it will be noted that the quantity of both ore and fill is still ample, therefore the Rosario vein holds out good promise of being a steady and important producer in the coming year.

Candelaria Vein.

The ore production from this vein has been quite satisfactory, the quantity being 7,763 tons, all of which came from workings below the Peña Blanca Level. We are still able to estimate 10,000 tons for the coming year.

Virtually no fill material was mined during the year, due to the section in which it exists being caved. Recovery work is now in progress, however, and the probabilities are that some time during the year mining of this will commence. The 162½ feet of development was mostly in the parallel stringers at the lower 100 foot level.

San Joaquin Vein.

The San Joaquin vein yielded 8,939 tons of ore which was of better value than the average battery grade. The broken ore reserve, which a year ago stood at 4,421 tons, has been increased to 7,709 tons, therefore, at the present time, there are nearly as many tons of ore broken and ready for the mill as was the total production in 1917.

Outside of 15 feet no development was done during the year, but as soon as stoping becomes lighter the plans are to do some driving in a westerly direction at either the lower 200 or 300

foot levels. Should this work disclose any ore it would then be advantageous to again resume driving in a westerly direction at the lower 650 foot level.

Jucuara Vein.

The winze in this vein was sunk 21 feet deeper, making its total depth now around 110 feet below the Peña Blanca level. The general appearance of the vein indicates that our last year's ore estimate of 4,250 tons at $13.00 was somewhat high, therefore this year the value per ton has been reduced to $11.00. The reserve remaining stands at 4,000 tons, inasmuch as the 1917 production was 357 tons.

This vein is not fully developed and this work has been held up until the Southwest cross-cut penetrates the western slope of the mountain. As this is soon to be accomplished, it is expected that development will be resumed in the course of the year.

Guadalupe Vein.

The development work at the lower 550 foot level has been moderately successful; the 1,706 tons produced during the year came from this section. The fill production, however, was close to 8,000 tons from which probably a greater profit per ton was obtained than from the ore, due to the facility with which it was mined. The fill and ore reserve for the new year is still ample, therefore this vein can be expected to produce at the same rate it did in 1917, should this be necessary.

West Vein.

The ore produced by the West vein amounted to 5,400 tons and most of it came from the section between the Peña Blanca and Upper 250 Levels. Some ore was also obtained from a section recently developed at the Lower 550 and there are possibilities that more can be expected. The ground between the Peña Blanca and Upper 250 levels still has some ore left and this is now being mined.

The fill output was 12,757 tons, which combined with the ore output makes this vein the largest producer in 1917. The West vein probably also yielded the largest net profit in 1917 as its

fills have proved more uniform in value than those of any of the others. The recovery work has now reached the Upper 700 level and while somewhat poorer fill is expected it can still be mined at a fair profit.

In spite of the large ore and fill output last year, we are still able to estimate 5,000 tons of the former, and 45,000 tons of the latter against 8,000 tons and 53,000 tons respectively at the beginning of 1917, so this vein bids fair to be a large producer for some time to come.

Not much as yet is known of the extensive workings below the Peña Blanca level. The supposition is that an important quantity of ore was stoped in former years and as a very high grade had to be maintained at that time there are possibilities that this section contains both ore and fill material now worthy of consideration. If opportunity offers, the plan therefore is to recover some of these workings during the coming year.

Southwest Vein.

As mentioned in last year's report, the ore body at the Zero level in Block 72 became exhausted, and, as the winze, which is the only means by which more ore could be developed in this section, has not been sunk deeper during the year, the production has been very slight, amounting to only 394 tons.

It is possible that instead of sinking the winze, which is rather costly, due to water, the Lower 650 West heading will be driven into the territory below the winze. One of these two plans will be adopted and it is expected that the development will commence some time during the coming year. We consider the ground below the winze mentioned as important and believe that development will disclose at least an equal amount of ore as was obtained from the Zero level.

Some stoping was also done at the Upper 350 level in the vicinity of Block 74 and while the upper extent of the ore has not yet been reached the vein is exceedingly narrow, which makes it difficult to produce a paying grade of ore.

Nueva Vein.

No ore was stoped from the Nueva during the year, therefore its reserve of 1,400 tons remains intact. Its fill production, however, amounted to 2,918 tons and the probabilities are that during the coming year it will produce an equal, if not greater, amount of this material.

A cross-cut is being run to this vein at the Lower 550 foot level off the Guadalupe vein, the object being to get underneath a promising looking section existing at the Lower 450 foot level.

Colonia Vein.

The Colonia Mine was a producer long before the Rosario group. The ore, while narrow and somewhat bunchy, has been of exceedingly high grade and while this was stoped many years ago there are numerous sections containing lower grade material, which for the past five or six years have continually yielded an important quantity of ore worth around $10.00 to $12.00 per ton. Last year the total ore reserves were 6,177 tons and the production amounted to 4,273 tons. The reserve for the coming year is 3,000 tons, which is certainly all that can be expected from such a steady producer.

As mentioned in last year's report, the plans were to drive a cross-cut at the Lower 650 foot level off the Guadalupe vein to get beneath the ore known to exist in the floor of the Lower 300 foot level. This cross-cut was started a few months ago, but the vein has not been cut as yet.

Buena Ventura Vein.

The 1917 production exceeded the ore reserves by over 65%, and not only this, the broken ore reserve has at the same time been increased by over 4,500 tons.

Development and recovery work during the year have permitted an even more generous estimate of ore than was the case last year so there is every indication that this vein will be a very important producer in 1918.

Northwest Vein.

The largest output from this vein was of fill material and most of this came from below the Peña Blanca level in the vicinity of Block 52. The reserves show there is still an appreciable quantity of low grade ore and fill so the vein can be expected to produce in 1918.

No development was done during the past year.

Culebra Vein.

The output of this vein during 1917 was 1,846 tons, all of which came from above the Upper 500 level. It is probable that more ore will be obtained from this same source, but, the bulk of the 2,000 tons estimated, is expected from the new level, the Upper 400, driven off the winze sunk in 1916.

Only 13.5 feet of development work was done in 1917 but the plans are to do more work at the Upper 400 level in 1918, and if it meets with success to parallel it at the Upper 500 level.

Crisanta Vein.

The Crisanta vein was a good producer during the past year, the ore coming from the Upper 700 and Upper 900 foot levels in the vicinity of the San Vicente vein. Its grade has been rather low; nevertheless, it yielded a fair profit. Some ore still remains above the 900 foot level but the greater portion of the estimate for this year will probably come from below the Upper 700.

Socorro Vein.

Inasmuch as the Socorro is one of the old veins and has been considered more or less worked out, its ore production during 1917 has been gratifying, a larger amount being stoped than was estimated in reserve. There are still sections remaining which give good promise of yielding ore during the coming year, therefore, a reserve estimate of 3,000 tons is shown which is 1,000 tons more than was estimated a year ago.

The 120½ feet of development in this vein in the past year was done principally to open up the ore estimated in the 1917 reserve.

Capitana Vein.

During the past year the Capitana vein produced a greater quantity of ore than its reserves showed. There are good possibilities for more ore above the Upper 550 and below the Lower 100 levels which will be stoped if it is found necessary to do so during the coming year.

The vein has never shown any persistency west of the San Miguel junction, but, there are chances that it may do so at some of the levels above the Peña Blanca, therefore some work with this in view is in mind for the coming year.

Veins Not Worked During 1917.

The veins in which no work was done during the year past are the San Vicente, Los Cedros, Catalina and North; their status therefore remains the same as when last reported upon.

Cross-Cuts.

Peña Blanca-Esperanza Cross-cut.

The distance driven in 1917 amounted to 487.5 feet and all of it was through very hard rock. A somewhat faulted section, encountered over a year ago and discussed in last year's report, has been traversed, four stringers being found, all at nearly right angles to the cross-cut. Three of these stringers give some indication of carrying value, and one of the plans during the coming year will be to do some development on each.

Three hundred and thirty-seven feet were driven in the Porvenir vein, the work being almost entirely to the southwest. Some ore has been found, but as its vertical extent has not as yet been determined, nothing can be said as to its importance.

We look upon the Esperanza cross-cut as a very important development project. The territory it is to explore is several thousand feet in extent and while due to the volcanic ash capping of the surface no vein croppings are exposed, the cross-cut and its auxiliaries are so projected that if any veins exist below the capping and extend to the Peña Blanca level, they will not be overlooked.

South West Cross-Cut (Clarke Tunnel.)

Due to the great distance, nearly two miles, that the heading of this cross-cut is from the Peña Blanca portal and also the fact that the waste from it has to be handled through one of the most congested traffic sections of the mine, progress during 1917 has not been as great as we had hoped. The distance driven, however, amounted to 1,183.5 feet and now not more than 300 feet are lacking before the western slope of the mountain is reached.

Shortly after the cross-cut was started you were advised that it entered a rock in which there was very little likelihood veins would be found. This has been true up to the present time and of course no veins can be expected in the 300 feet of ground remaining. On the western slope, however, there are some vein indications and as soon as this is reached prospecting will at once begin. The water of the Jucuara gulch will also be diverted through the mine and to the present power plants when needed and the cutting of much needed mine timber will also be started.

(NOTE: This cross-cut struck daylight on the Western slope on February 21st, the natal day of Lewis L. Clarke, Esq., Chairman of your Executive Committee, and in his honor will henceforth be known as "Clarke Tunnel.")

Future Development.

The greatest field for profitable development during the year lies in the South San Miguel vein and, as already mentioned, work is being done to locate it at the Lower 200 foot level, and, should the vein be found at this point, as we believe it will be, the territory made accessible will give opportunity for very extensive development. The possibilities for ore above the present 550 South San Miguel level we believe to be favorable, and as vigorous development is now being prosecuted, results are expected at an early date.

The cross-cut, which is being run at the Lower 650 foot level to cut the Colonia vein, will probably also cut the Nueva vein. While no ore at this depth in either of the two veins is

expected, we believe the Colonia ore body existing in the floor of the Lower 300 foot level will have sufficient downward extent and be in sufficient quantity to more than pay for the work done to reach it from the Lower 650 feet.

Another fair possibility for ore is to be the north, and this territory, although somewhat limited, is now being developed by a drift in the Concepción vein off the Lower 450 foot San Joaquin level.

Due to volcanic ash capping of the surface, as already explained, the Esperanza Cross-cut is being driven through ground about which very little is known. The character of the rock, however, is more or less the same as that in which the majority of the well known veins occur, therefore so long as this is true, the possibility always remains that an ore-bearing vein or veins will be found and it is on the strength of this principally that the cross-cut is being driven.

Mine Economics.

Air Compressors.

The two Ingersoll-Rand air compressors rendered excellent service throughout the year and at no time caused the slightest delay in the work, due to breakdown. They are carefully and periodically examined by our mechanics and electricians, and being kept in excellent shape, the same dependable service that these machines have given in the past can therefore be expected for a good many years to come.

Electric Haulage.

The heavy tonnage of both ore and waste handled during the year indicates that the electric haulage system had to be maintained at good efficiency. The increase of ore and waste, concentrating to the Peña Blanca level, necessitated the addition of another locomotive and this was obtained from the Lower 650 foot haulage, making now in all three locomotives at the Peña Blanca level. About the same conditions are prevalent at the Lower 650 level, so in the early part of the year a new and more powerful locomotive was installed, making the total number on this haulage three also. The trackage of the electric haulage

system has been considerably extended and a good deal of it will be permanent, as for instance the section in the South West Cross-cut.

Piping.

The many miles of compressed air piping are beginning to show signs of wear and principally in those sections of the mine where the water is slightly acid. In some cases it might be economical to make replacements with new piping, but realizing the abnormal conditions and the very high prices which pipe now commands, everything is being done to maintain the old lines so that no excessive air leaks develop.

Rock Drills.

Constant experiments are being made with the latest type of rock drill, both for development and for stoping, so that the greatest efficiency in these two branches of the work be attained. The piston drill has now been entirely replaced by a hammer drill, for development work, and during the coming year tests will be made with a still newer type of hammer drill for this class of work, to see if greater speed and smaller upkeep cost can be attained. The latest type of stoping drill, adopted about a year and a half ago, is still in use and its results have been highly satisfactory.

The Mill.

Tonnage Crushed.

	1917	1916
Total wet tons received	141,218	148,395
Average per cent. moisture	10.8	13.7
Total dry tons milled	125,900	128,030
Average per day milled (365 days)	344.9	350.7
Average per day full running time (340.1 days)	370.2	....
Average per day full running time (350.7 days)	...	364.4
Average per day full running time per 1,850 lb. stamp	18.5	18.2
Number of 1,850 lb. stamps	20	20

Recovery.

	1917	1916
Average ozs. silver per ton of ore	15.03	15.88
Average ozs. gold per ton of ore	.117	.124
‡Average value of ore per ton U.S.C.	$ 9.84	$ 10.43
Total ounces silver received	1,891,788	2,033,737
Total ounces silver recovered	1,670,612	1,810,886
Average silver recovery, per cent	88.31	89.04
Total ozs. gold received	14,670	15,904
Total ozs. gold recovered	13,790	14,989
Average gold recovery, per cent	94.00	94.24
‡Total value treated, U. S. Cy.	$1,239,302	$1,334,958
‡Total value produced, U. S. Cy.	$1,111,112	$1,205,219
Average total recovery, per cent	89.66	90.28

‡Silver per oz. troy at $ .50 U. S. Cy.
‡Gold per oz. troy at $20.00 U. S. Cy.

Supplies Used Per Ton.

	1917	1916
Sodium Cyanide 130%	2,463 lbs.	3,678 lbs.
Zinc Dust (on 18,650 tons ore)	.917 "	.894 "
Aluminum Dust (on 107,250 tons ore)	.306 "	...
Soda Ash (on 112,630 tons ore)	1.912 "	...
Lead Acetate	.009 "	.068 "
Lime 48.2% available	17.878 "	29.690 "
Tube Mill Pebbles	2.613 "	3.132 "

Total Milling Costs (Pesos).

	Total Costs		Cost Per Ton	
	1917	1916	1917	1916
Labor	118,590	121,756	.94	.95
Supplies	553,385	559,998	4.40	4.37
Power	41,595	26,770	.33	.21
Total	713,570	708,524	5.67	5.53

The following remarks amplify some of the data submitted above and should prove of interest.

Rate of Milling.

Although 2,130 tons less were milled during the past year than in 1916, the mill crushed at a greater rate than ever before. The periodic dry season and consequent shortage of power make the curtailment of tonnage necessary and, due largely to this, the full running time was only 340.1 days while in 1916, due to more favorable conditions, it was 350.7. days. But on the other hand in 1917 the crushing rate was at 370.2 tons per day, while in 1916 it was only 364.4 tons per day.

During part of the year one Hardinge Ball Mill handled a small percentage of the tonnage, but its function was more to relieve the stamps than to increase the tonnage milled. In the coming year, however, we expect to take greater advantage of its capacity, and provided operating conditions are more or less normal and supplies do not fail, a greater tonnage should be milled than heretofore.

Cyanide Treatment.

No change has been made in the mechanical procedure of treating the ore, and no new units have been added, or any of those in place discontinued during the year. In the chemical treatment also no changes have accurred, although as explained under "Precipitation" less cyanide and less lime are now being used per ton.

The average period of treatment per ton during the year was 56 hours, 42 minutes and distributed as follows:

Batteries to High Agitation Tanks (in weak solution)	4 hrs.	00 min.
In High Agitation Tanks (in strong solution)	40 "	12 "
High Agitation Tanks to Filter Presses	12 "	30 "
Total period of treatment per ton ore	56 "	42 "

Precipitation.

The increasing cost and scarcity of cyanide made it imperative that a means be found whereby less of this chemical be used while at the same time no decrease in the percentage of value recovery be engendered. The substitution of aluminum dust for zinc dust as a precipitant seemed to point the way out, as it is well known that under certain conditions an important quantity of cyanide is regenerated when aluminum is used. In last year's report we mentioned that laboratory experiments were already under way and although these did not prove entirely satisfactory, precipitation by aluminum dust, in place of zinc dust, was nevertheless definitely adopted on a working scale in February last. In spite of some discouraging features at the outset, one of which at first affected somewhat adversely the value recovery and another later, which prevented a contemplated increase in the milling rate, we are pleased to state that aluminum precipitation has proved a most important economic success.

In comparing the cyanide consumption per ton of ore, since the aluminum process was adopted, with that of the previous year, 1915, when zinc dust was used, an average saving of 1,215 pounds per ton of ore is shown. As 107,250 tons of ore have already been treated under the new process, 130,309 pounds of cyanide have therefore been conserved and it is almost needless to dwell upon the importance of this saving not only from an economic standpoint, but also from that of the policy of conservation of our Government who need some of the constituent elements of cyanide in munition manufacture.

Using the latest cost of cyanide, aluminum, zinc and soda ash as a basis, there is a saving of 38 centavos per ton, and as the decrease of lime consumption from 29.7 pounds per ton in 1916 (when zinc dust was used) to 17.9 pounds per ton in 1917, is almost entirely attributable to the adoption of aluminum precipitation, a further saving of 20 centavos per ton has been effected, which in all makes a total saving of 58 centavos per ton.

At the present time improvement in two directions presents itself in connection with the aluminum process. The first is a saving in aluminum dust and the second the further elimination of incrustation of calcium aluminate in the mill piping. We have good hopes of obtaining some success in solving each of these problems, and they will have our full attention during the coming year.

Recovery.

The silver recovery was a little over one-half per cent. less and the gold recovery about the same as in 1916, indicating that, in spite of the ore being on the whole less amenable to treatment, normal results were obtained. As production from the deeper sections of the mine is increased the ore is likely to become more base and therefore more difficult to treat. While not much thought has yet been given to this eventuality it is possible that a satisfactory means will be found to meet this problem when confronted with it.

Melting.

Melting the precipitate into Doré bullion continues to meet with success. Since aluminum precipitation was adopted more fluxing materials are necessary, but the bullion produced is con-

sistently finer, therefore the extra cost for flux is somewhat offset. As precipitates by aluminum weigh considerably less than an equal volume produced by zinc, it is now even more advantageous to do the melting here instead of shipping the precipitate in spite of increased cost in materials.

General.

The mill has now been in continuous operation for 5½ years and during this period it has treated 581,958 tons of ore. The general repairs therefore are likely to become more extensive and costly as time goes on. But this is an item which must be met and in which your staff does not try to practice false economy, so it can be said that the entire plant is in good condition and prepared to handle ore to its full capacity for quite some years to come.

Assay Office.

No changes have been made in this department during the year. 31,520 assays were made during 1917 and at a cost of 54 centavos per assay as compared with 29,576 assays in 1916, and at 54 centavos per assay. This department continues to have plenty of latitude for additional work so at no time is there danger of accuracy being sacrificed for the sake of speed.

The two Case oil furnaces continue to render excellent service and the rapidity with which they can be put into service as well as the constancy of their heat has been instrumental in increasing the capacity of this department considerably, as well as assuring standard accuracy.

Power.

The following are rainfall measurements during 1917 compared with the previous year:

	1917	1916
Total rainfall	74.28 in.	77.73 in.
Number of days during which rain fell.	159	169
Greatest rain fall in any one month		
(October)	16.28 "	15.52 " (August)
Greatest single rain	5.08 "	2.72 "

The rainfall during 1917, while not much below that of the previous year, was not as well distributed. Heavy single rains fell which did considerable damage to flume lines, and in the

Escobales gulch a landslide occurred which necessitated the building of a suspension bridge for the flume, which alone cost around 7,000 pesos. All the flumes now are in fairly good shape; but being built of wood, their upkeep becomes more costly each year.

The Guadalupe and San Juancito hydro-electric plants are maintained in first-class condition and supplied power to their full capacity without interruption.

The power distribution during the year was as follows:

	Kilowatt Hours	
	1917	1916
Mill	3,605,507	3,972,000
Mine	1,947,833	2,286,000
Electric Haulage	323,315	342,000
Surface Department	65,367	68,000
Surface Department Lights	65,367	68,000
Mill Lights	32,713	34,000
Mine Lights	27,668	34,000
Machine Shop	20,300	20,145
Laboratory	20,300	20,145
Total	6,108,370	6,844,290

Due to the heavy flume line maintenance already mentioned as well as further work on the transmission lines the power costs for the year have been quite heavy. We feel, however, that as a good deal of the important repair work has been concluded the costs for 1918 should be appreciably less.

Administration.

The Administration Department takes care of all work not directly under the Mine, Mill, Electrical and Mechanical Departments as well as the maintenance of police, schools, Medical Department and all road work.

The following is a comparative statement of costs for the years 1917 and 1916 in pesos:

			Cost Per Ton	
	1917	1916	1917	1916
Based on Tonnage Milled	125,900	128,030	...	...
Labor	242,052	275,667	1.92	2.15
Supplies	46,107	30,449	.37	.24
	288,159	306,116	2.29	2.39

The Tegucigalpa road as well as the timber roads and others were maintained in good condition during the year in spite of heavy rains and at no time was traffic interrupted for more than a day at a time. The maintenance of the Tegucigalpa road was 5,581 pesos during the year just closed as compared with 35,000 in 1916.

Hotel.

A word about this important department will not come amiss, particularly at this time when, due to the war, almost all supplies from the United States are difficult to obtain and some have become so costly as to be prohibitive.

The aim is to give the employees good substantial food, plenty of it, and to use as much of local produce as possible, but the greatest difficulty is the lack of variety which it is often hard to remedy. The garden, however, has been transferred to two plots, one on each side of the General Office, and we believe that by the closer supervision which this will permit, as well as less liability to theft, a larger variety and quantity of fresh vegetables should result.

Four thousand one hundred and sixty-four meals were served during the past year and at a cost of 1.21 pesos per meal per man.

Honduras Store and Commissariat.

A moderate amount of business was done by the Honduras Store during the year. Due to the war many goods are unobtainable and of course the price of nearly every article has risen. In spite of this a profit of 1,569 pesos is shown.

The Commissariat carries only such supplies as are used by the hotel and foreign family houses and as it sells at cost no profit is shown. Food supplies will be difficult to obtain henceforth, therefore every step is being taken to economize in the hotel.

Expansion Projects.

While no new projects have been undertaken during the year, your staff has kept in general touch with the various mining districts and has made to you such reports on properties as merited attention. Engineers are constantly in the field inspecting the

work in hand and also keep on the lookout for promising prospects.

The following is a brief discussion of the properties on which work was done during the year:

Sabana Grande.

Development.

Development work continued without interruption on this property during the year. Inasmuch as the ore reserves have not been figured up to this writing we cannot give the amount by which they have been increased during 1917. Important ore bodies have been found, however, at the Lower 130 ft. Level and the San Marcos-Amaya vein section at the Upper 25 ft. Level and the sinking of the winze below the Lower 130 ft. Level gives every indication that the ore of the Lower 130 ft. Level can be expected to extend to the new level to be cut, the Lower 250.

We hope to submit a full report on this property at an early date, which will show the extent and value of the ore found, but at the present time will only venture the opinion that we believe the ore discoveries made during 1917 have been of such magnitude as to fully warrant the expenditures made towards their development.

Mill.

The necessary machinery was selected last summer and some of it is already in the country. The excavations have been completed, the necessary retaining walls built, and as soon as the machinery is put in place a suitable building will be erected.

Power.

Nearly all development work and hoisting is being done by compressed air which is supplied by three 50 H. P. each, oil-burning, direct-connected air compressors. Two of these machines were installed during the year and, for that type of engine, are rendering good service.

Costs.

The expenditures made on this property during the year amounted to 135,279 pesos, distributed as follows:

Operating	96,688	pesos
New Construction	1,375	"
New Equipment Account	37,216	"
	135,279	"

Santa Rosa De Potosi.

Location: Department of Choluteca.

The option on this property has been extended and work was continuous throughout the year. Some of the veins discovered look promising, but as yet none of them have shown the requisite uniformity and extent of ore values necessary to make a paying proposition. There are still possibilities that a change will occur for the better when greater depth is attained, and it is the object to determine if this is so during the coming year.

The total cost of operating this property during 1917 was 36,723 pesos.

Guasucaran.

Location: Department of Tegucigalpa.

Work on this property was discontinued about six months ago as the objective of the outlined development was reached. The results are not satisfactory, but the property is being held pending an examination which should decide if further work is necessary or not.

The total expenditures during 1917 were 10,376 pesos.

Financial.

The Banco de Comercio continues to handle all of the Company's drafts at the prevailing rate of exchange, and while there has been a dearth of silver currency, due to a large exportation of this out of the country, there has never been any actual difficulty in promptly meeting the payrolls. A moderate circulation of bank bills went into effect in the early part of the year, and

while labor was somewhat prejudiced against them at first, due mostly to a scarcity of small change, in the last few months this prejudice has decreased and at the present time there is no complaint when from 20% to 40% of the wages are paid in bank bills.

Government.

We are pleased to say that throughout the year not only has the Company enjoyed the hearty support and full cooperation of His Excellency, the President, Dr. Francisco Bertrand, but of all his subordinate officers as well.

There is reason to believe that such pleasing relations can be expected to continue during the coming year, therefore the Company can proceed with its large operations, counting on the Government's full support.

Visit of Officers of the Company.

Mr. J. M. De Hart, the Vice-President, arrived in the country a few days before the close of the year. While, of course, there has not yet been time for him to take up any questions, we bespeak for him on his present visit the same hearty cooperation given heretofore which can but redound to the best interests of the Company.

Conclusion.

The work done during the past year and the results obtained therefrom should be looked upon with much satisfaction, more so in fact than was the case last year, because, firstly, due to the high silver market the production has been the greatest in the history of the Company; secondly, the substantial figure at which the ore reserves stand, and, thirdly, the exceedingly low cost at which all the work reviewed in this report has been accomplished, in spite of the unprecedented rise in price of all commodities. The uncertainty of the supply situation in 1917 as well as the exorbitant price which many supplies have attained, has caused your staff to institute economies in many directions. Perhaps the most important of these was the adoption of aluminum precipitation in February last, which not only resulted in a saving of 57 centavos per ton, but at the same time resulted in the

conservation of a very large quantity of cyanide, some of the ingredients of which we believe are in great demand by our Government for munition manufacture. Scrap heaps are being continually culled for useful material, and have been particularly productive in such articles as old pipe, mine rails, shafting, etc., articles which before the war it would not have been economy to re-use. Your staff and employees wish to go on record that they are thoroughly alive to the seriousness of the times, and being all good Americans are making every effort to practice economy, which is the order of the day, and further wish to assure you that no pains will be spared to continue along these lines in the future.

In view of the appalling world conditions existing at the present time it is difficult to make any predictions as to the future, but if an adequate amount of necessary supplies is forthcoming all the other requisites are here to make the year 1918 as large if not larger from the standpoint of production as has been the one just closed.

Permit your staff to thank you for the hearty cooperation accorded it during the year past and without which what has been done would not have been accomplished.

Respectfully submitted,

A. R. Gordon,

General Manager.

Annex "A"

General Statement of Yearly Data.

NUMBER 1	YEAR 1917			YEAR 1916		
BASED ON	130,973 Tons Broken			129,275 Tons Broken		
MINING COSTS:	Pesos	Per Ft.	Per Ton	Pesos	Per Ft.	Per Ton
Development	186,915.77	19.93		214,465.76	16.97	
Timbering for same	23,077.08	2.46		11,752.01	.93	
Tramming for same	19,086.56	2.03		24,339.44	1.93	
	229,079.41	24.42		250,557.21	19.83	
Number of feet driven exclusive of 1115.5 ft. recovery of old works	9,380.50			12,637.50		
Cost of development per ton			1.75			1.94
		Per Ton			Per Ton	
Stoping	419,929.41	3.20		415,827.82	3.23	
Timbering for same	62,567.24	.48		66,555.61	.51	
Tramming for same	119,954.62	.92		135,354.97	1.05	
	602,451.27	4.60		617,738.40	4.79	
Cost of Stoping per ton			4.60			4.79
The cost of other operations, exclusive of Electric Haulage and Track Maintenance, was	177,267.43		1.35	203,318.39		1.57
Total Cost of Breaking Ore	1,008,798.11		7.70	1,071,614.00		8.30
NUMBER 2						
BASED ON	125,900 Tons Crushed			128,030 Tons Crushed		
Labor	660,976.22		5.25	746,980.49		5.83
Supplies	362,572.65		2.88	345,354.96		2.70
Power	25,614.17		.20	17,683.65		.14
Total Mining Cost	1,049,163.04		8.33	1,110,019.10		8.67
Less: Adjustment in Broken Ore in Stopes Account, per President's letter 384				55,700.00		.44
Net Mine Operating Cost	1,049,163.04		8.33	1,054,319.10		8.23
MILLING COSTS:		Per Ton			Per Ton	
Labor	118,589.96	.94		121,754.86	.95	
Supplies	553,384.83	4.40		559,998.15	4.37	
Power	41,595.69	.33		26,770.31	.21	
Total	713,570.48	5.67		708,523.32	5.53	

SURFACE AND ADMINISTRATION COSTS:				
Labor	242,051.89	1.92	275,667.50	2.15
Supplies	46,107.66	.37	30,449.19	.24
Total	288,159.55	2.29	306,116.69	2.39
RECAPITULATION OF COSTS:				
Mine	1,049,163.04	8.33	1,054,319.10	8.23
Mill	713,570.48	5.67	708,523.32	5.53
Administration	288,159.55	2.29	306,116.69	2.39
Net Operating Cost	2,050,893.07	16.29	2,068,959.11	16.15
Increase Broken Ore in Stopes, Adjustment in Broken Ore in Stopes Account, per President's letter 384.			55,700.00	
Total Cost	2,050,893.07	16.29	2,124,659.11	16.15

REDUCTION WORKS:				
PRODUCTION:		Aver. Per Day		Aver. Per Day
Dry Tons Crushed	125,900	344.93	128,030 Tons	350.77
Ounces of Silver Produced	1,670,611.74 ozs.	4,577.02	1,810,885.95 ozs.	4,961.33
Ounces of Gold produced	13,790.315 ozs.	37.782	14,988.798 ozs.	41.065
Value, Silver @ 50c; Gold @ $20.00.	$1,111,112.17	$3,044.14	$1,205,218.93	$3,301.96
Bars Doré Bullion	953		644	
Boxes Precipitates	134		569	

Actual Extraction by Bullion Plus Tails and Bullion.

		Percentage of Extraction	Average Per Ton		Percentage of Extraction	Average Per Ton
EXTRACTION: MILL HEAD:						
Total ounces Silver received	1,891,787.50	88.309	15.026 ozs.	2,033,736.77	89.042	15.884 ozs.
Total ounces Gold received	14,670.40	94.001	.1165 ozs.	15,904.459	94.243	.1242 ozs.
Total Value	$1,239,301.75	89.656	$9.84	$1,334,957.56	90.281	$10.426

REMARKS:						
Wet Tons delivered to Mill during Year		141,217.88			148,395.26	
Average % of Moisture	10.833	15,298.33		13,699	20,328.52	
Dry Tons		125,919.55			128,066.74	
Ore in Bin Jan. 1st, 1917	610.41			573.67		
Ore in Bin Dec. 31st, 1917	629.96	19.55 Increase		610.41	36.74 Increase	
		125,900.00			128,030.00	
Average Rate of Exchange during Year		219 %			259 %	
Honduras Peso equal to about		46c. U. S. C.			39c. U. S. C.	

Annex "B"

Summary of Calculated Ore Reserves (At 13 cu. ft. per ton).

Veins	Av. Width in Ft.	Tons of Ore	Per Cent. Waste	Tons of Ore & Waste	Total Value U.S.C.	Value at Mill U.S.C.
San Joaquín	1.2	9,981	52	15,172	$139,035	$13.93
Catalina	.6	891	70	2,699	52,269	19 58
North	.5	1,013	51	2,066	33,572	16.25
South West	1.4	3,543	30	4,606	69,090	15.00
South San Miguel	1.8	35,093	49	68.110	789,543	11.59
		50,431		92,653	$1,083,509.	$11.69 (average)

Summary of Estimated Ore Reserves (At 13 cu. ft. per ton).

Buena Ventura	7,000	$63,000	$9.00
Candelaria	10,000	90,000	9.00
Colonia	3,000	28,500	9.50
Capitana	2,000	20,000	10.00
North San Miguel-Concepción	10,000	100,000	10.00
Esperanza	1,000	9,000	9.00
Guadalupe	3,000	24,000	8.00
Jucuara	4.000	44,000	11.00
Nueva	1,400	14,000	10.00
North West	5.000	45,000	9.00
Rosario	20,000	150,000	7.50
Socorro	3,000	30,000	10.00
Crisanta	2,000	16,000	8.00
Culebra	2,000	20,000	10.00
Stringers	3,000	30,000	10.00
West	5.000	42,500	8.50
Total	81,400	$726,000.	$8.92 (average)

Summary of Estimated Fills (At 17 cu. ft. per ton).

Candelaria	10.000	$75,000	$7.50
Guadalupe	15,000	112,500	7.50
Rosario	15,000	112,500	7.50
Buena Ventura	5,000	35,000	7.00
North West	5,000	35,000	7.00
Nueva	5,000	35,000	7.00
West	45,000	315,000	7.00
Total	100,000	$720,000.	$7.20 (average)

Summary.

Calculated Ore	92,653	$1,083,509	$11.69
Estimated Ore	81,400	726,000	8.92
Estimated Fills	100.000	720,000	7.20
Broken Ore in Stopes (at 21 cu. ft. per ton)	29,243	263,187	9.00
Total	303,296	$2,792,696.	$9.21 (average)

Annex "B" (continued).
Broken Ore in Stopes.
December 31st, 1917.
Totals by Veins.

Veins	Tons
Rosario	4,003
San Joaquín	7,709
San Miguel	3,650
San Miguel South	409
Socorro	1,333
Capitana	719
North West	1,109
Buena Ventura	5,139
Candelaria	3,229
Crisanta	443
Culebra	49
Colonia	469
Guadalupe	982
Grand Total	29,243

Annex "C"

Veins	1917 Reserve (Including Broken Ore in Stopes)	1917 Production (Including Broken Ore in Stopes)	Tons Left for 1918 (Exclusive of New Reserves)	Tons Produced in Excess of Total 1917 Reserve
Buena Ventura	4,881	11,776	....	6,895
Candelaria	16,968	10,992	5,976	....
Catalina	2,669	....	2,669	....
Colonia	6,077	4,742	1,335	....
Capitana	4,740	4,908	....	168
Esperanza	1,757	457	1,300	....
Guadalupe	3,753	2,688	1,065	....
Jucuara	4,250	357	3,893	....
Nueva	1,400	....	1,400	....
North	2,066	....	2,066	....
North West and Stringers	6,909	2,940	3,969	....
Rosario	34,959	15,318	19,641	....
Socorro	4,895	4,920	....	25
South West	5,000	394	4,606	....
San Joaquín	31,820	16,648	15,172	....
San Miguel, Concepción	17,213	20,275	....	3,062
Stringers: Culebra, San Vincente, Crisanta	7,152	5,877	1,275	....
South San Miguel	21,634	4,603	17,031	....
West	8,000	5,400	2,600	....
Total	186,143	112,295	83,998	10,150

Stope Fills.

Candelaria	10,000	471	9,529
Guadalupe	20,000	7,937	12,063
Rosario	15,000	2,755	12,245
Buena Ventura..	10,000	6,255	3,745
North West	10,000	5,509	4,491
West	53,000	12,757	40,243
Nueva	8,000	2,918	5,082
Total	126,000	38,602	87,398

Development.

Development Ore from various veins	...	4,246	....	....
Grand Total..	312,143	155,143	171,396	10,150

Annex "D"

Development for Year—1917.

Veins	Drifts	Raises	Cross-Cuts	Shafts	Totals	
San Miguel (North)...	239	...	100		339	feet
San Miguel (South)...	2,761.5	415.5	412		3,589	"
Concepción	....	...	16.5		16.5	"
Capitana	170	96	2		268	"
Candelaria	106.5	...	56		162.5	"
Rosario	773.5	68.5	85		927	"
Buena Ventura	592	...	5.5		597.5	"
Nueva	....	...	131.5		131.5	"
Colonia	143.5	...	224		367.5	"
Jucuara	....	...	...	21	21	"
Socorro	120.5	...	...		120.5	"
Guadalupe	262.5	...	...		262.5	"
West	211	160.5	...		371.5	"
Esperanza	337	...	487.5		824.5	"
South West	....	...	1,183.5		1,183.5	"
Culebra	13.5	...	...		13.5	"
Crisanta	....	...	170		170	"
San Joaquín	15	...	...		15	"
Totals	5,745.5	740.5	2,873.5	21	9,380.5	"

Old Workings Recovered.

West	805.5	feet
Guadalupe	85.0	"
Candelaria	225.0	"
Total	1,115.5	"

Annex "E"

Vein Production—1917.

Dry Tons.

Veins	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Totals
San Miguel (North)	1,388	1,240	2,152	1,135	951	1,633	717	1,230	1,483	1,587	1,598	1,511	16,625
Capitana	463	137	96	423	501	800	936	611	3	52	58	109	4,189
South West	233	81	54	14	...	...	...	...	...	...	...	12	394
Candelaria	462	437	462	706	572	774	751	693	1,010	634	546	716	7,763
Rosario	877	552	1,313	1,295	1,163	866	1,553	1,204	1,010	758	279	445	11,315
Buena Ventura	504	554	655	663	607	736	376	362	382	324	612	862	6,637
North West	309	246	143	196	32	147	139	24	46	92	154	303	1,831
San Joaquin	1,472	969	662	287	148	800	989	893	787	766	958	208	8,939
San Vicente	...	...	...	...	...	...	...	...	...	...	6	...	6
Colonia	313	353	498	218	297	153	597	339	440	692	299	74	4,273
Esperanza	220	165	72	...	...	...	...	...	...	...	...	...	457
Jucuara	130	125	73	...	29	...	...	...	...	...	...	...	357
Socorro	590	469	688	173	161	168	163	316	229	174	209	247	3,587
Crisanta	208	148	185	736	485	191	438	429	258	189	137	129	3,533
Guadalupe	...	...	...	...	...	107	98	89	21	180	557	654	1,706
San Miguel (South)	...	...	...	...	...	483	203	173	805	407	855	1,265	4,194
Culebra	183	85	79	90	3	126	209	138	324	549	50	13	1,846
West	442	457	528	453	641	424	402	449	421	488	258	437	5,400
Ore from development	446	540	450	371	185	102	134	251	367	283	484	633	4,246
Totals	8,240	6,558	8,110	6,760	5,775	7,510	7,705	7,201	7,586	7,175	7,060	7,618	87,298

Average car capacity, .56 tons.

Annex "F"

Fill Production—1917.

Dry Tons.

Veins	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Totals
Candelaria	...	17	34	51	46	...	...	52	79	66	65	61	471
Guadalupe	709	860	276	357	482	342	429	463	919	949	990	1,161	7,937
Rosario	324	428	29	...	103	67	236	325	491	380	159	213	2,755
West	1,009	1,167	1,009	907	922	1,281	932	1,015	801	1,445	1,047	1,222	12,757
North West	455	831	727	464	345	413	429	397	258	412	482	296	5,509
Buena Ventura	263	239	115	215	427	291	790	1,252	697	456	913	597	6,255
Nueva	...	...	...	146	...	96	479	795	169	417	484	332	2,918
Totals	2,760	3,542	2,190	2,140	2,325	2,490	3,295	4,299	3,414	4,125	4,140	3,882	38,602

Tons of Fill Production

Summary.

Total Vein Production	87,298	dry tons
Total Fill Production	38,602	" "
Grand Total Production	125,900	" "

New York & Honduras Rosario Mining Company. Profit and Loss Statement for the Year Ended December 31, 1917.

INCOME.

Production of Silver and Gold		$1,674,193.80
Miscellaneous Income		2,651.85
Total Income		$1,676,845.65

DEDUCTIONS.

Operating Expenses, Freight and Expenses on Bullion	$1,005,265.76	
New York Administration Expenses	62,896.10	
Sundry Charges	7,804.40	1,075,966.26
		$600,879.39
Set aside to Reserve for:		
Depreciation	55,181.22	
Fire Insurance	3,824.27	
	59,005.49	
Provision for Taxes, etc.	35,000.00	94,005.49
Balance carried to Surplus Account		$506,873.90

SURPLUS ACCOUNT, DECEMBER 31, 1917.

Balance January 1, 1917		$1,050,619.52
Increase in valuation of Mines, as of March 1, 1913, to comply with the Government Regulations		1,500,000.00
Profit for the year 1917, see Profit and Loss Statement		506,873.90
		$3,057,493.42
Set aside for Depletion of Mines, year 1917	220,325.00	
Dividends paid during the year	300,000.00	520,325.00
Balance December 31, 1917, carried to Balance Sheet		$2,537,168.42

New York & Honduras Rosario Mining Company.
Balance Sheet as of December 31, 1917.

ASSETS.

Fixed Assets:			
Mines, Real Estate and Concessions		$2,800,812.38	
Buildings, Plants and Miscellaneous Properties		1,123,074.63	
Sundry Investments		134,794.12	4,058,681.13
Current Assets:			
Cash in New York	46,590.88		
Fire Insurance Fund in N. Y.	11,192.12		
Guarantee Fund in N. Y.	2,215.98		
In New York Banks	59,998.98		
Cash in Honduras	354,773.61		
Total Cash and Cash Items		414,772.59	
Bullion in Transit		325,260.41	
Liberty Bonds		100,791.27	
Accounts and Note Receivable		115,303.68	
Materials and Supplies		427,909.03	
Broken Ore in Stopes and Ore in Mill Bin		121,171.61	1,505,208.59
			$5,563,889.72

LIABILITIES.

Capital Stock:		
200,000 shares of $10.00 each		$2,000,000.00
Current Liabilities:		
Notes, Drafts, Accounts Payable and Provision for Taxes, etc.		567,783.88
Reserves:		
For Depletion, after deducting $100,000.00 distributed to stockholders in 1917 and $98,900.92 expended for expansion and development	21,424.08	
For Depreciation	361,774.38	
For Fire Insurance	11,192.12	
For Exchange Fluctuations	64,546.84	458,937.42
Surplus, per Surplus Account		2,537,168.42
		$5,563,889.72

AUDITOR'S CERTIFICATE.

We have audited the books of account of New York and Honduras Rosario Mining Company, kept at its office in New York, and we certify that the above Balance Sheet in our opinion is properly drawn up so as to show the true financial position of the said company on December 31, 1917.

THE SECURITY AUDIT CO. OF NEW YORK,

(Signed) GEO. WEAVER, *Vice-President.*

New York, April 9, 1918.

Table Showing

Bullion Production		Dividends Paid.		
1882	$ 2,452.27			
1883	12,900.42			
1884	149,741.39			
1885	244,444.70			
1886	224,157.58			
1887	613,446.05	1887 No. 1	$ 37,500—	2½%
1888	767,632.15	1888 Nos. 2 to 5	60,000—	4 %
1889	590,189.55	1889 Nos. 6 to 14	150,000—10	%
1890	113.28			
1891	369,587.19	1891 Nos. 15 to 16	30,000—	2 %
1892	614,498.67	1892 Nos. 17 to 21	165,000—11	%
1893	492,534.87	1893 Nos. 22 to 25	150,000—10	%
1894	392,485.92	1894 No. 26	37,500—	2½%
1895	158,164.42			
1896	449,525.88	1896 Nos. 27 to 28	30,000—	2 %
1897	568,872.06	1897 Nos. 29 to 40	180,000—12	%
1898	611,467.76	1898 Nos. 41 to 48	120,000—	8 %
1899	798,994.77	1899 Nos. 49 to 60	180,000—12	%
1900	827,443.12	1900 Nos. 61 to 75	225,000—15	%
1901	780,760.18	1901 Nos. 76 to 93	300,000—20	%
1902	490,273.34	1902 Nos. 94 to 100	105,000—	7 %
1903	436,818.29	1903 No. 101	15,000—	1 %
1904	721,374.87	1904 Nos. 102 to 108	105,000—	7 %
1905	993,065.39	1905 Nos. 109 to 121	180,000—12	%
1906	1,112,171.69	1906 Nos. 122 to 139	285,000—19	%
1907	791,347.62	1907 Nos. 140 to 153	210,000—14	%
1908	788,910.23	1908 Nos. 154 to 165	180,000—12	%
1909—10 months	636,500.00	1909 Nos. 166 to 173	120,000—	8 %
1910	890,700.00	1910 Nos. 174 to 180	105,000—	7 %
1911	887,169.59	1911 Nos. 181 to 182	90,000—	6 %
1912	944,212.67	1912 No. 183	30,000—	1½%
1912-13—12 months	1,051,273.28			
1913—last 3 months	328,100.05	1913 Nos. 184 to 188	220,000—11	%
1914	1,239,877.13	1914 Nos. 189 to 193	240,000—12	%
1915	1,191,760.70	1915 Nos. 194 to 197	240,000—12	%
1916	1,553,114.86	1916 Nos. 198 to 205	400,000—20	%
1917	1,674,193.80	1917 Nos. 206 to 211	300,000—15	%
Total	$24,400,275.74	Total	$4,490,000	
Amortization Distributions		1917 No. 1	100,000—	5 %

Dividends 1 to 182 inclusive, on Capital Stock	$1,500,000.00
Dividends 183 to 211 inclusive, on Capital Stock	2,000,000.00
Amortization Distribution, No. 1, on Capital Stock	2,000,000.00

Comparative Statement of Working Capital.

December 31	1913	1914	1915	1916	1917
Cash and Cash Items	$106,866	$ 90,618	$112,208	$259,459	$515,562
Bullion in Transit	207,438	252,348	271,735	353,115	325,260
Ore in Stopes and Mill Bin	89,077	96,884	99,951	122,873	121,171
Inventories and Supplies	250,940	272,805	292,731	300,759	427,908
Accounts Receivable	41,805	5,020	1,896	66,497	115,303
Total Quick Assets†	$696,126	$717,675	$778,521	$1,102,703	$1,505,204
Current Liabilities‡	91,344	71,138	59,026	257,498	567,783
Net Working Capital, exclusive of Reserves, Capital and Surplus	$604,782	$646,537	$719,495	$845,205	$937,421
Increase over Preceding Year		41,755	72,958	125,710	92,216
Increase over Dec., 1913, Working Capital		41,755	114,713	240,423	332,639
Increase in Investments over 1913		38,309	43,781	103,521	134,794
Additions to Plant, etc., since 1913					207,879
Increase of Assets since 1913					$675,312

†Embraces all Cash in Banks and Agencies, Accounts and Notes Receivable, Inventories, but does *not* include Plants, Real Estate, Mining Property, Equipment nor Investments.

‡The Liabilities embrace everything except Capital Stock, Surplus and Reserves.

REPORT

OF

NEW YORK and HONDURAS ROSARIO MINING COMPANY

COLUMBIA UNIVERSITY

1918

NEW YORK, JANUARY 1st, 1919.

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UNIVERSITY
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OFFICERS 1919-1920.

WM. A. PRENDERGAST, *President.*
LEWIS L. CLARKE, *Vice-President.*
A. R. GORDON, *Vice-President.*
W. C. LANGLEY, *Treasurer.*
J. PERLMAN, *Secretary.*

BOARD OF DIRECTORS 1919-1920.

W. S. VALENTINE, *Chairman.*

SIDNEY ABBEY,
LEWIS L. CLARKE,
H. A. GUESS,
I. HEIDELL,
J. C. F. JACOBY,
W. C. LANGLEY,
WM. A. PRENDERGAST,
W. L. SAUNDERS,
M. F. SOTO,
AMBROSE G. TODD,
P. R. WEILER.

EXECUTIVE COMMITTEE 1919-1920.

W. S. VALENTINE, *Chairman.*

LEWIS L. CLARKE,
H. A. GUESS,
W. C. LANGLEY,
W. L. SAUNDERS,
AMBROSE G. TODD.

Annual Report of the President of the New York and Honduras Rosario Mining Company.

NEW YORK, January 1, 1919.

To the Stockholders:

The results of the Company's business for the year 1918 *have been satisfactory, especially so in view of the interruptions to transportation, the unsettlement of markets, and the rise in prices of supplies due to war conditions. The Company's record in its mining business is best told in the report of General Manager Gordon herewith submitted. A study and consideration of this report is respectfully urged upon the stockholders. It is the medium through which they can acquire the most information regarding the operations of the mine. The General Manager's report explains the work that has been performed in the past and furnishes encouragement in respect to the future prospects of the Rosario property. The report also shows that despite the unfavorable conditions under which all industry operated during the last year, this Company handled an increased tonnage—the largest in its history—of* 129,900 *tons, as contrasted with* 125,900 *tons in the year* 1917; *that although there was a decided shortage of labor there was an increase in development driven of* 1,885.5 *feet and this at a lower footage cost than in the preceding year; that the year* 1918 *gives the highest record of production of the present mill and that with the changes and additions contemplated a greater tonnage will be handled in the year* 1919; *that the ore reserves on the* 31*st day of December,* 1918, *were* 282,599 *tons as against reserves on December* 31, 1917, *of* 303,336 *tons, a decrease of* 20,737 *tons. Under existing circumstances, this decrease need not be regarded as an unfavorable sign, especially in view of the shortage of labor.*

It is with pleasure that I report to you the excellent condition of the Company's plant in Honduras and the efficient character of its operations there. This opinion is based on my personal observations derived in two recent visits to the mine.

It is also fitting that official expression should be given of the appreciation of the officers and directors of the Company for the service which has characterized its staff located in Honduras.

The following statement gives the essential facts of the Company's operations in respect to the value of the production and the general per ton costs of all branches of the business:

INCOME FROM OPERATIONS

Tons			Per Ton
129,900	Production of Gold and Silver.....	$1,803,751.79	$13.89
	Less—Freight and expense on bullion	75,778.34	.58
129,900	Gross Income	$1,727,973.45	$13.31
	OPERATING EXPENSE		
129,984.12	Mining	$573,994.55	$4.41
	Milling	371,014.49	2.86
	Total Mining and Milling.....	$945,009.04	$7.27
84.12	Deduct—Adjustment Ore in Mill Bin Inventory	779.63	....
129,900	.....	$944,229.41	$7.27
	Mine Administrative Expense.....	178,479.65	1.37
	New York Administrative Expense..	100,750.58	.77
129,900	Total Operating Expense.....	$1,223,459.64	$9.41
129,900	Net Operating Income.....	$504,513.81	$3.90

Dividends of $200,000 *and a distribution of* $200,000 *from the Depletion Reserve Account were paid to the stockholders during the year* 1918. *These disbursements represent a gross payment of twenty per cent. on the capital stock, being the same percentage paid during the years* 1916 *and* 1917.

Your attention is especially invited to the income and profit and loss statements and balance sheet submitted herewith.

Owing to the advanced price of silver which has obtained during the past two years, much of the silver currency formerly used in Honduras has disappeared from circulation. This has occasioned considerable difficulty in the Company's providing itself with currency required for its weekly pay rolls. Fortunately, no interruption ever occurred in the Company's ability to pay its employees promptly, due to the export of American currency to the mine in the Fall of 1918. *On October* 26, 1918, *an agreement was made with Messrs. Vaccaro Brothers & Company of New Orleans, owners of the Banco Atlantida (of Honduras), under which they have obligated themselves for a period of eighteen months to provide this Company in its Honduras*

operations with such exchange as it requires and to furnish currency in the denominations necessary. This arrangement which has been proceeding satisfactorily, coupled with the action of the Honduras Government in issuing a decree making United States currency legal tender at the rate of two to one, which means the establishment of the gold standard in Honduras, has in all probability obviated any further difficulties in the currency situation for some time to come. It is gratifying to see that American currency is being accepted by our employees and the merchants and circulated by them in conformity with the purpose of the decree referred to.

In 1916, *ostensibly for the purpose of stabilizing the exchange situation and assuring itself of adequate exchange for its essential requirements in Honduras, the Company purchased a controlling interest in the Banco de Comercio, an institution organized under the laws of Honduras and located in Teguicigalpa, the capitol. Being satisfied from developments late in the year* 1917 *that it might be advisable to dispose of this interest, arrangements to do so were competed on October* 26, 1918, *under which Messrs. Vaccaro Brothers & Company purchased this Company's interest in the Banco de Comercio. The resultant loss in the disposition of the stock held by this Company was* $82,069.34.

In the early part of 1918 *the Company also acquired the ownership of the Commercial Export Company, organized under the laws of the State of Delaware, for the purpose of doing an export business. This ownership has since been disposed of.*

Owing to complications which arose at the Port of Amapala, due to war conditions, the Company also became interested in a port agency and lighterage business at Amapala, with the object of assuring itself of adequate transportation facilities for the supplies intended for mine use. Your directors came to the conclusion that interests in outside concerns, even where the nature of the business done by them might at times prove helpful to the Company, were not generally justified, and, consequently, the Company has also disposed of its share in the lighterage business at Amapala. It is the belief of your directors that the Company's activities should be confined exclusively to the mining business.

An expansion policy is an absolute necessity. The very nature of the Company's business requires that plans should be made reasonably in advance for the extension of its work in view of the probability that at some time its present holdings will not continue to produce ore at a satisfactory rate. While the results of production in the Rosario mine seem to defy predictions of exhaustion it would not answer to proceed on the present favorable conditions, and a general plan should be adopted to protect the stockholders' investment.

In the furtherance of such a policy the Company on April 30, 1917, *secured a controlling interest in the San Marcos mine, located at Sabana Grande, Honduras, and owned by the Sabana Grande Honduras Mining Company. The General Manager's report gives in detail the facts regarding the work already done. With the very early completion of the mill and its availability for steady output, it is expected that during the year* 1919 *there will be satisfactory evidences of the wisdom of the investment which has been made in this enterprise.*

On your behalf the Company very gladly conveys to President Francisco Bertrand and the Government of Honduras its acknowledgment of the co-operation which has been extended to it by these authorities, a co-operation that has been marked by manifestations of friendly regard and a high standard of business dealing.

WM. A. PRENDERGAST,

President.

Annual Report of the General Manager

SAN JUANCITO, HONDURAS, January 1, 1919.

TO THE PRESIDENT,
17 Battery Place,
New York, N. Y.

DEAR SIR:

We submit for your consideration the following report which deals with work performed on all the Company's mining interests in Honduras during the fiscal year closing December 31, 1918.

PRODUCTION

	1918.	1917.
Dry tons treated	129,900	125,900
Ounces silver produced	1,587,468	1,670,612
Ounces gold produced	9,748	13,790
Ratio of gold to silver	164	121

The product was shipped to New York City and consisted of 1,002 bars of Doré Bullion averaging 978 silver and 7.01 gold, fine.

A material drop in the production of gold will be noted. This is caused by decrease in the ratio of gold to silver in the ore milled due to exhaustion of some of the high gold bearing deposits. Unless these are replaced by new discoveries the ratio of silver to gold during the coming year is likely to be the same or greater.

The supply situation was critical several times during the year and once owing to difficulties in the Port of Amapala it was necessary to decrease work in the mine due to shortage of blasting fuse. But an ample supply of reserve ore kept the mill fully supplied so no actual loss was sustained from the standpoint of production.

We have endeavored to make up the continuous decrease in the grade of ore by increasing the milling tonnage to maintain the production and while this has so far met with success there is a limit to which it can be carried. The cost per ton of ore is really an intermediate cost from which the best economi-

cal relation from the standpoint of production between the value per ton and total tonnage treated cannot readily be obtained. We have, therefore, kept the cost of bullion production per troy ounce during the past year, which we consider the ulitmate cost and which should be a better guide towards the object desired.

Due to the scarcity as well as very high cost of all materials during the war we have gotten along with many makeshifts. Now that the war is over and there appear to be prospects of conditions nearer normal we will be obliged to place many orders with you, particularly for mine rails, cars and pipe. While the cost of these supplies will be deferred over a period of more than one year their purchase will nevertheless be reflected in a higher cost per ton. It would be false economy to continue much longer in the way we have, particularly from the standpoint of mine development, and while our orders are liable to be heavy they will represent the minimum we can get along with.

THE MINE.

Ore Reserves.

Annex "B" shows in detail the total ore reserves existing on January 1, 1919. An average mining width of 3½ feet is assumed but the waste allowance in several cases has been decreased as it will be possible to retain some of it in the stopes.

In this year's calculations and estimates the value of silver is taken at $1.00 U. S. C. per ounce and that of gold at $20.00 U. S. C. per ounce. A summary of the four different classes of reserves is given here below.

Summary.

	Tons of Ore and Waste.	Total Value, U. S. C.	Value per Ton at Mill, U. S. C.
Calculated ore in place at 13 cu. ft. per ton	123,301	$2,104,579	$17.07
Broken ore in stopes at 21 cu. ft. per ton	24,858	372,870	15.00
Estimated ore in place at 13 cu. ft. per ton	57,400	801,200	13.96
Vein fills in place at 17 cu. ft. per ton	77,000	1,001,000	13.00
Total	282,559	$4,279,649	$15.15 average

Dollar silver and an expected heavier crushing rate by the mill during the coming year has permitted including as ore good deal of material which under less favorable circumstances it would not pay to mine. Considering that 129,900 tons were extracted in the year past we are very pleased to be able to show reserves which are only 20,737 tons below those reported a year ago. By making comparison of reserves existing in the different veins we call your particular attention to those of the South San Miguel, which, although the largest producer of best ore, shows a greater tonnage and value than a year ago. The usual Annex "C" indicates that the ore estimates for 1918 were conservative and the same procedure has been adopted in preparing those herewith presented, dollar silver being taken as a basis this year, while last year it was 50 cents,—the gross of the reserves submitted is $1,486,953 more.

The value of $15.15 per ton is the average of the total reserve and does not necessarily mean that this is to be the value of the battery head for the coming year. Ore whose existence is practically certain, but which cannot be mined for at least a year, is included in the reserves, therefore it is a factor in making up the value per ton. None of the three classes of reserves, each of which has a different value per ton, can be mined singly at a rate of 11,500 tons per month, but each can be worked in such proportion as to permit on this per month basis a more or less equal production of bullion as was obtained in the year past.

DEVELOPMENT.

Footage Made.

Year.	Drifts.	Raises.	Crosscuts.	Shafts.	Total.
1918	6,804.5	2,205.5	2,072.5	183.5	11,266 ft.
1917	5,745.5	740.5	2,873.5	21.0	9,380.5 "
Increase over 1917.....					1,885.5 "

The detailed distribution of the development footage is shown on Annex "D."

1,885.5 feet more were driven than in 1917 and 5,316 feet or 47% of the total footage made was in the South San Miguel vein. The cost per foot as compared with 1917 is $1.40 lower.

Ever since the possibility of developing ore in large quantity in the old vein system became exhausted, some eight years ago, we have been confronted with the necessity of driving long and expensive crosscuts in a search for new veins. While this policy has proved eminently successful, it takes a long time to drive one of these crosscuts and then when a vein is found the characteristic narrowness of the ore bodies, less than two feet, in width, requires a very large amount of development to expose a comparatively small amount of ore. The constant shortage of native labor does not permit as much development as conditions sometimes dictate, therefore, when the labor situation in the United States is such as to permit the engagement of competent miners it may become necessary to have a certain number of these, as was the case several years ago.

Ore Production.

The following is a comparative summary of ore production and the details of which appear in Annexes "E" and "F":

	1918.	1917.
Ore broken from veins	74,816 tons	83,052 tons
Ore from development of veins	7,358 "	4,246 "
Stope fill material	47,726 "	38,602 "
Total produced and milled	129,900 tons	125,900 tons
Percentage of fill	36.7 "	30.7 "
Number of producing veins	18	17

An increase in fill material and ore from development will be noted. The intention was to produce about 40% fill during 1918, but due to the difficulties it causes in the mill this object could not be attained. During the coming year we expect to have the mill in shape to take a larger percentage of fill if necessary.

About 60% of the ore from development came from the South San Miguel and the increase as compared with 1917 is due to 47% of the total development being done in this vein.

The South San Miguel also was the largest ore producer during the year yielding 16,539 tons and in this respect taking the place of the North San Miguel which in 1917 produced about an equal amount. The West vein again holds the record for fill output which amounted to 14,500 tons. The greatest total

output of fill and ore came from the Buena Ventura vein, this being 8,886 tons of fill and 9,840 tons of ore, or a total of 17,726 tons.

There is still sufficient fill material to assure for the coming year as heavy an output as the mill is able to treat and with the improbability of a raise in the cost of materials we look for no increase in stoping costs during the coming year.

Owing to the very high cost of rails and pipe, the Mine Department has gotten along without placing heavy orders for these in the past year by temporarily shifting some of this equipment from one section of the mine to another. The limit of this procedure has now been reached, therefore the new installations will somewhat raise the cost per ton until the extent of this equipment again reaches normal proportions.

Veins.

A brief discussion dealing with the more essential points of each vein is presented here below.

Catalina & North Veins.

The Catalina and North veins have not been worked during the past year. While the reserves in all the other veins are based on silver at $1.00 per ounce we have retained the 1918 reserve figures, which are based on silver at 50 cents per ounce, because the higher price of this metal permits the stoping of this ore by machine which by producing more waste with the ore will bring it down to about the value indicated.

South San Miguel Vein.

This vein easily held first place last year in development footage, quantity of ore found and ore produced as will be seen in Annexes "D," "B" and "E."

The cross-cut at the Lower 200 ft. level failed to intersect the vein, therfore a raise was driven to cut the vein, and a few days ago (March 24, 1919) it cut the vein 110 feet above the L. 200.

There is a large field now available for development below the Peña Blanca level and during the coming year the work here will be pushed. The upper levels have been extended a consid-

erable distance to the South and show that the vein is about on a line with the Esperanza, thus making it probable that the latter and the San Miguel are the same.

Due to errors in surveys location of the vein above the U. 550 has been retarded but corrections have been made and we are now prepared to proceed with rapid development of this section.

The vein is less regular and has a tendency to split into stringers much more than was the case in North San Miguel, of which it is an extension. This means dirtier ore, therefore poorer ore, but proper allowance has been made for this in the ore reserve calculations.

We are well pleased with last year's development results as they permit this vein to become a heavy ore producer for some time to come.

North San Miguel—Concepcion.

The North San Miguel vein dropped from the largest producer in 1917 to a comparatively small one in the year just closed. The reason for this is the virtual exhaustion of its reserves. The vein has been fully developed from its junction with the West vein to the surface as also at depth and, the only ground now remaining is that above the U.550 and U.700 ft. levels. Almost the entire ore reserve of 10,997 tons is in pillars scattered throughout the vein which will be taken out as opportunity offers.

What has been said concerning the North San Miguel equally applies to the Concepción vein, which is an extension of the North San Miguel, excepting that there are no ore reserves. The 463½ feet of drifting in the Concepción vein was at the lower 400 ft. level in a northerly direction. No ore was found, but we expect to drive a little further on the possibility that some cross stringers at the surface may extend to the depth of this level.

Esperanza Vein.

No work whatsoever was done in this vein during the past year, therefore there was no change in the existing ore reserves. By examining the plan you will note that it is very probable this vein will prove to be the southern extension of the South San Miguel.

Rosario Vein.

Considerable drifting has been done at the zero level to cut a wide ore body existing in Blocks 40-42, inclusive, which proved so productive above the Peña Blanca level. This territory has just been reached, and while the ore does not appear to have the same value as at the level above, we expect most of it can be stoped. In the latter part of the year a cave in Block 37, at the Peña Blanca level, cut off for several months a stope of the best ore in this vein. The ground has just been recovered and it is expected that most of the ore can be removed.

The lower 400 ft. level between Blocks 37 and 46 was recovered and the vein sampled. The results show that one or two stopes of ore can be expected from this section, also that some development work, particularly below the Lower 400, is well warranted. Between Blocks 31 and 35 we expect to stope a large tonnage, which is rather poor in grade.

A large number of small pillars still exist in this vein and there is still opportunity for considerable recovery of caved workings.

The output from this vein was 8,439 tons of ore and 3,026 tons of stope fill.

Guadalupe Vein.

Most of the 3,664 tons of ore mined in 1918 came from the Lower 550 ft. level and the 9,125 tons of fill from above the Peña Blanca level between Blocks 46 and 53. We are able to estimate only 1,500 tons of ore, as the body at the Lower 550 level has been exhausted, but this is more than made up by the very material fill estimate. In 1918 this was 15,000 tons, and although over 9,000 tons were removed during the year, we are able now to estimate 26,000 tons.

San Joaquin Vein.

The easy accessibility and cheap stoping possible permit lowering the grade by the inclusion of material long developed but rather poor. This has increased the tonnage, although no ore was found by the 191 feet of development, and 7,606 tons were extracted in the past year.

The workings are connected with the Lower 650 electric haulage, and as a heavy tonnage can be sent to the mill at almost any time, this vein has served very well in keeping the mill running when all the other Lower 650 ore chutes were out of commission.

Further development is advisable to the West, and possibly this may be undertaken during the coming year.

Candelaria Vein.

Recovering the Upper 150, Upper 250 and Upper 350 Levels constituted the most important work in this vein during the past year. Small pillars of ore will be obtained, but the principal object of this work is the stope fill. All development was below the Peña Blanca level and amounted to 628½ feet. Six thousand nine hundred and fifty-two tons of ore were produced, all of which came from below the Peña Blanca level and between Blocks 36 and 38, inclusive. The fill production amounted to 1,246 tons, but during the coming year the plans are to mine this at a heavier rate. The only possibilities for developing ore in quantity lie above the Upper 500 ft. level, but as it is completely caved we expect to enter this territory through another section of the mine.

West Vein.

Our second largest producer during the year was the West vein, its output being 17,450 tons, composed of 2,950 tons of ore and 14,500 tons of fill. The ore came from stopes at the Peña Blanca level and all the fill from the U. 350 and above. The 4,000 tons of ore estimated are expected from a block of ground at the Peña Blanca level and a section recently recovered at the Lower 300 ft. level. We have been obliged to decrease the fill estimate by 5,500 tons after deducting that mined during the year from the quantity estimated for 1918, because it has been learned that most of the material in the Upper 700 stopes is too low in grade to be mined at a profit. Some further work will be done at the Upper 700, however, as there are possibilities for richer material.

During the coming year we expect to do considerable drifting to the West at the Lower 300 and Lower 650 ft. levels

and look for small bunches of ore. One of these levels will be extended into the Southwest vein to permit the removal of an important body existing there, in blocks 70-74 inclusive.

Culebra Vein.

Most of the 475 feet of development was at the Lower 450 level, and it was moderately successful. The ore disclosed is not as rich as that at the level above, but it can be stoped at a profit.

We believe we have located the surface outcrop of this vein, and therefore will proceed to develop it from the Upper 600, Upper 350 and Upper 150 levels, besides continuing some of the present work in the Upper 450 and Upper 500 levels.

There is good possibility that last year's production of 1,380 tons will be exceeded during 1919.

Southwest Vein.

No development or stoping was done during the year, but the ore reserves have been increased, both in tonnage and gross value, to conform with the increased price in silver.

It has been decided to extend either the Lower 300 or the Lower 650 West vein heading into Blocks 70 to 74, in which the reserve exists below the zero level. As the distance to be driven is close to 1,000 feet, no production can be expected during the coming year.

Buena Ventura Vein.

Though the third vein to be worked by the Company, the Buena Ventura was the largest producer during the year, yielding 9,840 tons of ore and 8,886 tons of fill, or a total of 18,726 tons.

The 1918 ore estimate was exceeded slightly and that of fills by a very large margin. Possibly the same may be the case at this time next year, but general appearance of the workings at present accessible do not justify a larger estimate of ore and fill than shown on Annex "B."

The only opportunity for development lies in sections left between stopes and levels, and most of the 1,115.5 feet driven in 1918 opened several of these.

Nueva Vein.

This vein produced 2,210 tons of fill but no ore. Due to the press of more important work in its vicinity, development consisted of only 85.5 feet, but in the coming year we expect to recover a caved drift at the Zero level and also do some driving at the Lower 550 level. The results obtained from the fill removed during the year have been somewhat disappointing, therefore this year's estimate shows only 2,000 tons.

Northwest Vein.

The Northwest is the second vein worked by the Company and is similar in character to the Buena Ventura. Its ore production was 1,359 and that of fill 8,601, the latter exceeding the estimate by 2,601 tons.

There is a block of ground at the Peña Blanca level which has good ore possibilities and should opportunity offer during the coming year some stoping will be done.

The ore, while a little higher in grade, is narrower than that of the Buena Ventura and, being also more scattered, its removal proceeds at a slow rate as compared with the Buena Ventura.

Crisanta Vein.

The 1,193 tons of ore came mostly from the Upper 900 stope. This penetrated the surface a few months ago, therefore production will decrease until new stoping ground can be made available at the lower levels.

Development consisted of 119.5 feet, of which 113.5 feet represent a shaft sunk from the Upper 700 level. The purpose of the shaft is to determine the downward extent of ore stoped some time ago on the Upper 700 level.

Socorro Vein.

Again has production from this vein exceeded our ore estimates for last year, and again are we able to estimate an equal amount of ore in this year's reserve.

All the ore came from the large stope above the Upper 900 ft. level, and this is now very close to the surface. When this stope is concluded attention will be given to the pillars existing

at the lower levels, where the ore, although narrow, is of good grade.

Development consisted of 108.5 feet and there are sections which warrant still further work.

Capitana Vein.

No development was done in the year past, and what ore was produced came from remnants existing in old stopes. Shortage of rails made it necessary to remove the track from all the levels, but some of this will soon be replaced as stoping ground still remains.

It is possible that during the coming year development will be done at the Upper 900 ft. level and stoping at the Upper 550 ft. level.

Colonial Vein.

Last year's ore estimate of 3,000 tons was exceeded by a production of 3,181 tons, still we are able to make a similar estimate for the coming year. This is due to the stopes themselves giving the indications, as no development in the vein has been done for some time.

The cross-cut driven for this vein at the Lower 650 failed to intersect it, although the peculiar rock in which it exists was reached. A raise is now being driven to locate the vein, and we have good hopes of finding it at no great distance. Ore exists in the floor of the Lower 300 level, and as soon as the raise intersects the vein the subsequent work will consist in making this available for removal.

Veins Not Worked During 1918.

The veins not worked during the past year are the Jucuara, San Vincente, Los Cedros, Catalina, North, and Southwest.

Cross-Cuts.

Esperanza Cross-cut

The heading of this cross-cut was advanced 250 feet during the year. Drifting was also done on a West stringer found in 1917, but no ore was disclosed. Thirty feet were driven in the Porvenir vein west of the cross-cut, and the showing in the heading appears encouraging enough to well warrant further

work. A vein was cut last September, having a northwesterly and southeasterly direction which has been named the "El Carmen." Development leads to the belief that it is a true crushed zone, the foot wall being quite compact, while the hanging wall is badly shattered and in most places considerably oxidized. What ore has been found is very bunchy, erratic in width, splitting into stringers, and as it is mixed considerably with waste rock there is not much of it that can be stoped at a profit. The lateral extent that it is possible for the Carmen to attain at the Peña Blanca level is nearly a mile, and while, of course, not prepared to say that it will cover this distance, we are of the opinion that it will have considerable permanency which makes it quite possible that development will disclose less shattered sections in which ore of stoping importance could be expected. We consider the El Carmen a very important strike.

Work in the Esperanza cross-cut is now assuming large proportions and as it will greatly increase if our hopes in the El Carmen vein materialize compressed air piping of larger diameter will have to be installed and other improvements made.

The territory ahead of the cross-cut is very extensive and well warrants development. The cross-cut will therefore be continued at such speed as circumstances permit.

Future Development.

Intersection of the South San Miguel vein about 300 feet below the Peña Blanca level will now permit vigorous development from this point and it is expected that during the coming year the ore blocked below the Peña Blanca level will be made available for stoping.

The El Carmen vein has very encouraging features, its development is therefore of first importance. Its position with respect to the main haulage ways makes its development impossible below the Peña Blanca level, except through a shaft, and this will be sunk as opportunity offers.

A body of ore, whose extent is not known, exists in the floor of the Zero Southwest vein in Block 72. Instead of continuing the present shaft it will be best to drive either the

L. 650 or L. 300 West heading into this block and this work will serve a twofold object, as it will also develop this section of the West vein.

Exploration of the extensive Southern and Southwestern territory should be vigorously continued through the Esperanza cross-cut. Besides the El Carmen vein two encouraging stringers, one of which is the Porvenir, have been found and further work is well warranted on them.

Although the lateral and depth limits of the Candelaria vein have been reached a moderate extent of unexplored territory remains above the U. 500 foot level which has possibilities of low grade ore. Work should be done therefore to prove this ground.

Mine Economics.

Timber and Lumber.

As soon as the Clarke Tunnel penetrated the western slope of the mountains it made available a large tract of timber. The mine sawmill was immediately transferred from the Crucero to the Jucuara gulch and located within 500 feet of the Clarke Tunnel portal and has been supplying lumber since then at a cost of $12.50 per thousand feet, against $22.50 per thousand feet when at Crucero. The cost of round timber has also been very materially reduced.

Electric Haulage.

Both Jeffrey electric locomotives, in service over 16 years, have been permanently scrapped, as not only had they become virtually worn out but proved entirely inadequate for the present heavy work. They were partly replaced by the purchase of a 7-ton locomotive in 1917 which during the year past rendered satisfactory service. There are five locomotives in continuous use distributed as follows: On the Peña Blanca haulage two 5-ton and one 6-ton, and at the Rosario level haulage one 6-ton and one 7-ton. An additional 7-ton locomotive has been ordered for the Rosario level, as the two machines there are in continuous use and we desire a spare unit, so that there be no interruptions to the mill should one of them become damaged.

Drilling Equipment

The two air compressors operated throughout the year with their usual excellent dependability. They are in first class condition and can be counted upon to render similar service for many years to come.

Experiments are in progress with more powerful drifting rock drills submitted by two different manufacturers. It is expected that some time during the coming year a decision will be made as to the machine most suitable for our work and an order for a number will then be placed.

Difficulty was experienced with defective drill steel, which has caused no little delay in the work. Defective material of all kinds has been the universal complaint, however, since the war, and it is to be hoped that manufacturers will drop this shortsighted policy now that the war is over.

The increase of work in certain sections of the mine will soon necessitate the changing of air piping already in place by lines of large diameter. The larger pipe will be ordered in the early part of the coming year and it is expected that some of the changes will be made before its close.

THE MILL.

Tonnage Crushed.

	1918.	1917.
Total wet tons received	143,050	141,218
Average per cent. moisture	9.1	10.8
Total dry tons milled	129,900	125,900
Average tons per day milled (365 days)	355.9	344.9
Average tons per day milled, full running time (340.1 days)	....	370.2
Average tons per day milled, full running time (344.6 days)	376.9	....
Average tons per day milled, full running time (per 1850 lbs. stamp)	....	18.5
Average tons per day milled, full running time (per 1850 lbs. stamp)	18.8	....
Number of 1850 lbs. stamps	20	20

Recovery.

Total ounces silver received	1,829,883	1,891,788
Total ounces silver recovered	1,587,468	1,670,612
Average silver recovery, per cent	86.75	88.31
Total ounces gold received	10,394	14,670
Total ounces gold recovered	9,748	13,790
Average gold recovery, per cent	93.79	94.00

Making comparison with 1917 the gold recovery is about the same, but that of silver is 1.56% lower. This drop is laid mainly to two causes—(a) lower grade ore, (b) more refractory ore. At Rosario, as at most other silver mines, the silver content in the residue or tailings does not drop in proportion to the siver content in the ore and as in 1918 the silver per ton of ore averaged 14.09 ounces as against 15.03 ounces in the year previous, lower extraction of this metal was to be expected. The necessity of drawing heavily upon ore sources in unoxidized zones of the mine has made the ore, as received at the mill, less amenable to treatment than for some years past and this was the second contributory factor in lowering the extraction by the figure noted. It has been known for some time that when treating ore containing an extra large amount of sulphides, insoluble sulphides of silver and other metals could be found in the tailings. Up to the present these insoluble sulphides have not occurred in alarming proportions, but to be prepared against the time they should, an extensive line of experiments is highly advisable to learn if their recovery is economically warranted or not. We have in mind application of the Flotation Process on the tailings and within a few months expect to be well equipped to start such experiments. We propose to ship several tons of typical Rosario tailings to the flotation mill at Sabana Grande to be tested under actual working conditions and we feel that the results obtained should be decisive. There is no doubt that some recovery will be obtained and whether or not the adoption of flotation is warranted will rest on as to whether or not the resulting concentrates will be rich enough to cover cost of production, shipment and smelting charges and yield a profit besides.

Another line of investigation with a view to better extraction suggests itself along electro-chemical lines. We expect, some time during the coming year, to try ozone in the agitation system to determine if the more intensive oxidation thus permitted will be beneficial to extraction without at the same time neutralizing too much free cyanide.

Supplies Used Per Ton.

	1918.	1917.
Sodium cyanide, 128%	2.397 lbs.	2.463 lbs.
Aluminum dust	.252 "	.306 "
Zinc dust	...	.917 "
Soda ash	1.742 "	1.912 "
Lead acetate	.002 "	.009 "
Lime %, 48.2 available	...	17,878 "
Lime %, 44.6 available	16,916 "	...
Tube mill pebbles	2.779 "	2.613 "

Crushing.

In crushing 129,900 dry tons during the past year the mill established a record, and had it not been due to setbacks caused by the influenza epidemic, malicious blasting of power plant pipe lines and chute troubles in the mine, it is estimated that 4,000 tons more could have been handled.

Although the crushing department is adequate enough to handle ore at the rate of 12,000 dry tons per month, difficulty in proper settling of the slimes and incrustation of calcium aluminate in the mill piping were the principal causes in preventing the maintenance of this figure as a wet season monthly average. Sodium alkalinity of the solutions, since aluminum was adopted as a precipitant, has decreased the slime settling efficiency, but steps have been taken to increase the settling radius by the purchase of an additional 35 ft. x 10 ft. Dorr Thickener. Given exceptionally favorable ore, both from the standpoint of settling and treatment, it is possible to exceed 12,000 tons per month even now, as was demonstrated last December when 12,700 dry tons were crushed, exceeding the best previous record by 1,000 tons.

Incrustation in Piping.

Soon after the adoption of aluminum dust as a precipitant and the use of sodium carbonate in connection therewith, incrustation of calcium aluminate in certain sections of the mill piping began, and this at such rapid rate as to interfere with the tonnage to no small extent. In last year's report we touched upon this subject, stating that endeavors were being made to eliminate this trouble. We are now pleased to be able to report that in the latter part of the year a means has been adopted whereby

the calcium aluminate, though still formed at the same rate, instead of precipitating in the piping, now does so in open launders, from where it is removed with the tailings. Besides at once doing away with the expense of constantly cleaning pipe, this improvement has also permitted an increase in the crushing rate to the extent of about 300 tons per month.

Cyanide Treatment and Recovery.

The average time of treatment per ton during the year past and as compared with the year previous is as follows:

	—1918.—		—1917.—	
	Hrs.	Min.	Hrs.	Min.
From batteries to high agitation tanks (weak solution)	5	00	4	00
In high agitation tanks (strong solution)	40	20	40	12
In high agitation tanks to filter press	13	16	12	30
Total	58	36	56	42

Precipitation.

Precipitation by aluminum dust was even more successful than in 1917 as, due to certain changes in the mixing vats, the aluminum consumption, per ton of ore, was reduced from .306 lb. per ton of ore, the average in 1917, to .252 lb., the average for the year past. This represents a saving of 22%.

Precipitation by aluminum occurs along two chemical reactions; one in which 1 part of aluminum precipitates 4 parts of bullion, and the other at a ratio of 1 part of aluminum to 12 parts of bullion. Rosario practice follows the 1 to 4 reaction, but as this ratio has been exceeded slightly on one or two occasions it is evident that precipitation along the 1 to 12 ratio must also take place. One of the plans for the coming year is to determine what conditions must obtain to favor more the 1 to 12 ratio, and in this connection installation of the Crowe Vacuum Process is under consideration.

The approximate cyanide regeneration due to aluminum was .75 lb. per ton of ore and the total cyanide saving by using aluminum instead of zinc, about 1.22 lbs. per ton of ore.

The present cost of cyanide, zinc dust and aluminum dust and sodium carbonate makes the use of aluminum economically advantageous, but should the prices of these commodities drop to anywhere near pre-war figures the use of zinc dust may

again become advisable, particularly in connection with the Crowe Vacuum Process, where an important saving in zinc would be engendered.

Melting.

The average cost of producing one bar Doré Bullion, averaging 984.3 fine from precipitates averaging about 836 fine, was $11.05, in which $1.40 deferred charges for furnaces are included.

The two electric precipitate dryers, constructed here, rendered excellent service, and their continuous use represents an important saving in costly firewood. The refinery addition, housing a dry ball-granulator, and one laboratory concentrating table and driving motor for both, handled all the slag resulting from the two fuel oil furnaces, recovering therefrom 2½ bars of Doré Bullion. The residue slag from this plant was sent through the mill and cyanide plant.

Supplies Used.

We draw your particular attention to the decrease in every item, except one, of supplies used per ton. This decrease is a legitimate one, as it was not made at the expense of efficiency in the process.

Milling Costs.

In the table showing distribution of costs and their comparison with the year previous, you will note that the cost per ton is 4 cents less, although the cost of supplies was not lower and the rate of exchange 20 points against us. This is due to the greater tonnage treated and decrease in supplies per ton.

General.

The present mill has now treated 711,858 dry tons. Originally intended for a capacity of 200 tons per day, its daily average during the year 1918, over a period of 365 days, was 355.9 dry tons, and in December last, 12,700 tons, or 409.6 tons per day, were handled. The machinery purchased to permit doubling the capacity cost less than $15,000, U. S. C., and consisted of additional units to departments to bring these up to the capacity of the rest of the mill.

With the changes and additions contemplated a greater tonnage than ever will be handled in the coming year.

Power.

The rainfall measurements during 1918, as compared with those of the year previous, are as follows:

	1918. Inches.	1917. Inches.
Total rainfall	72.11	74.28
Number of days during which rain fell	188	159
Greatest rainfall in any one month	(June) 14.89	16.28 (Oct.)
Greatest single rain	2.82	5.08

While the total rainfall was the lowest since 1915, the number of days it rained is the largest since records have been kept. This more even distribution has reacted very favorably upon the water supply, therefore, in spite of less rain, as much if not more power was available during the year.

There were no heavy single rains, therefore no damage was caused either to flume lines or roads. All flumes have been kept in good repair and several sections of the Guadalupe flume replaced. The water diverted from the Jucuara gulch through the Clarke Tunnel has helped to the extent of 75 to 100 H.P. in the dry season, permitting operation of the mill at full capacity about two weeks longer.

The distribution of electrical power during the year was as follows:

	KILOWATT HOURS. 1918.	1917.
Mill	3,548,669	3,605,507
Mine	2,138,094	1,947,833
Electric haulage	310,755	323,315
Surface department	62,150	65,367
Surface department lights	62,149	65,367
Mill lights	31,078	32,713
Mine lights	20,563	27,668
Machine shop	22,988	20,300
Laboratory	18,643	20,300
Total	6,215,089	6,108,370
Increase	106,719	....
Cost per kilowatt hour	$.00399	$.00569
Decrease	.00170	.....

Based on horsepower generated we show:

	1918.	1917.
Horse-power hours	8,333,434	8,191,324
Cost per horse-power hour	$.00300	$.00390
Cost per horse-power year	2.612	3.378
Decrease in cost of H. P. year in 1918..	.76	

The cost per horsepower year does not include depreciation, interest and insurance, but represents only the actual cost of operation and maintenance. It is estimated that $1.60 per H.P. year would cover all the items not included, this being based on 9% per annum on an investment of $150,000.

The transmission lines having all been thoroughly overhauled in 1917, and that between the Guadalupe and Rosario equipped with lighter wire and placed on towers, the upkeep cost during the year past has been reduced to a minimum. The heavy wire taken off the line mentioned will be used for trolley wire and special hangers have already been ordered.

Both the San Juancito and Guadalupe plants rendered satisfactory service, and can be expected to do so for many years. It will be necessary to repaint both pipe lines, and this, as well as some repair work to the Pelton wheels, will be effected during the coming dry season.

Surface Department.

All road work, upkeep of flume lines, stone and wood construction, saw mill, carpenter shop, in short, all surface work not taken care of by the Mine, Mill or Electrical Departments, comes under the Surface Department. The biggest item is that of maintenance of the Tegucigalpa road, and during the year past this was $3,429, as compared with $2,548 in the year previous. Heavier repairs will be necessary during the coming year, and the cost will therefore be somewhat higher.

Machine Shop.

The increased amount of repair work in the mine and mill has put considerably more work on this department during the past year than in the year previous. As the machinery in the Mine, Mill and Electrical Departments becomes worn with constant use, repairs will increase and to meet this situation some additions to the machine shop equipment will be necessary during the coming year. Most of these will consist of an additional lathe, power hammer and a large pipe threading machine, for which orders will be placed early in the coming year.

Hotel.

The hotel served 36,390 meals during the year at a cost of 58 cents per meal, as compared with 41,640 meals at 55 cents in 1917.

In spite of food restrictions, due to the war, it was possible to prepare wholesome meals, the truck garden contributing a larger amount of vegetables than ever before.

Honduras Store and Commissariat.

The Honduras Store sales amounted to $23,428, from which a profit of $1,397 was obtained. Slow selling articles are not being re-ordered, as there is no profit in handling them. The coupon system was abolished in the early part of the year because, while adopted for the sake of convenience, it was abused.

The purpose of the Commissariat is to supply the Hotel and certain married employees with foodstuffs at cost, and during 1918 such sales amounted to $14,029, the profit being $20.

Garrison.

The garrison during the past year consisted of a commandant and 58 officers and men. All are appointed by the Government but are in the Company's pay and at its orders.

Medical Department.

During the year 9,612 cases were treated, of which 4,750 were influenza, due to which 149 deaths resulted.

The influenza became epidemic last October, and to such extent as to cause a complete suspension of the Mine Department and very considerable curtailment of work in others for two weeks. The whole population of San Juancito was prostrated, and the greatest difficulty was encountered in getting people to take the medicines prescribed. With additional medical assistance from the Capital, as well as persuasive measures, the people soon recovered, and in less than a month health conditions again became normal. No expense was spared in combating the epidemic and extending help. Each patient was visited daily by a doctor or hospital interne, food was sent to the needy and the dead buried.

A new hospital building was erected in the first part of the year to take the place of one which had to be dismantled owing to a landslide. The building is of one story, 48 ft. by 24 ft., stone and wood construction, and consists of an outside waiting room, office, drug store, two wards and consulting, examination and operating rooms, all fully equipped.

The total cost of construction was $2,383, U. S. C.

Schools.

The two schools, one for boys and one for girls, are maintained by the Company, and the average daily attendance of 110 boys and 87 girls during the past year is the largest on record. The principals and teachers, 9 in all, are appointed by the Mayor of Tegucigalpa, although paid by the Company, and in certain matters under its administration. This practice of serving two masters has not always worked well toward efficiency in the past, but we are glad to say that during the year just closed the very best of harmony prevailed.

The cost of maintaining the schools in 1918 was $4,754, as compared with $3,565 during the year previous.

Assay Office.

This department made 27,462 assays, at a cost of 30 cents per assay, during the year 1918, as compared with 31,520 assays at 25 cents each during the year previous. The increase is due to higher cost of materials and because there was a smaller number of assays over which to divide the fixed labor cost. The Oil Fuel Assay Furnaces will soon have to undergo extensive repairs, and the parts required have already been ordered.

Expansion Projects.

The following is a brief description of work done on all Expansion projects in the year past.

Sabana Grande Mine.

Development.

Development work was continuous throughout the year, being distributed as follows:

Drifting.	Raising.	Crosscutting.	Sinking.	Total.
1,257	416	908	84	2,665 feet.

Most of the drifting and raising and all sinking was in the San Marcos vein. A new level, the Level 250, was cut, and subsequent drifting had disclosed important ore bodies which probably are a continuation of those existing at the L. 130 level, but are not as rich. Sinking of winze Block 14 has been resumed for a projected new level, the L. 370, from which we expect to determine the downward extent of the L. 250 ore.

Work was also done in the Amaya vein at the Upper 25 ft. Level, and an important body of ore found. Preparations are being made to sink below this level to develop the downward extent of this ore.

Most of the crosscutting done was in search of veins parallel to the San Marcos. One small stringer was struck, and some development done, but the stringer proving valueless, the work was stopped. The crosscuts are being continued.

Sabana Grande Ore Reserves January 1, 1919.

Calculated

Ore Block	Width	Oz. Silver	Oz. Gold	Tons Ore	Value U. S. Currency Per Ton	Total	Tons Ore and Waste		% Waste	Value U.S.C. Per Ton Ore & Waste
No. 1	2.3	122.45	.32	965	128.84	124,330	1,469		34.28	84.68
" 2	2.6	86.65	.22	600	91.05	54,630	809		25.71	67.65
" 3	2.6	99.04	.29	2,729	104.79	285,997	3,690		25.71	77.54
" 4	1.9	79.28	.22	1,001	83.68	83,763	1,844		45.71	45.43
" 5	1.8	27.00	.14	439	29.80	13,082	854	To be sorted	48.57	21.27
" 6	1.4	50.50	.12	395	52.90	20,895	988		60.00	21.16
" 7	2.4	101.05	.32	610	107.44	65,538	895		31.71	73.25
" 8	2.2	95.88	.32	310	102.28	31,706	493		37.14	64.27
" 9	3.0	28.40	.10	772	30.40	23,468	904		14.28	26.06
" 10	1.6	75.59	.31	1,469	81.79	120,149	1,728	To be sorted	15.00	69.52
" 11	1.3	33.79	.30	384	39.78	15,275	452	To be sorted	15.00	33.82
" 12	2.7	50.75	.22	987	55.15	54,433	1,272		22.86	42.79
" 13	4.5	49.30	.35	1,791	56.30	100,833	1,792		....	56.30
				12,452		994,099	17,190			

Estimated—Average Value per ton Ore and Waste $57.83
Ore on Dump, 1,000 tons @ $50,...$50,000.00

Note—Blocks 5, 10 and 11 were not calculated on mining width of 3.5 feet, but as sorted ore with 15% waste added for incomplete sorting.

Total Value Ore Reserves assuming value of silver at $1 per oz. and gold at at $20 per oz. U. S. C.... $1,044,099.00

SUMMARY— Source	Average Width In. Ft.	Tons of Ore	% Waste	Tons Ore & Waste	Total Value U. S. C.	Value at Mill per Ton U. S. C.
Calculated Ore	2.4	12,452	27.5	17,190	$994,099.00	$57.84
Ore on Dump	..	.....	...	1,000	50,000.00	50.00
Total				18,190	$1,044,099.00	$57.40 Average

Ore Reserves.

On the map and statement attached thereto we show in detail the ore reserves as of January 1, 1919. In all calculations silver is taken at $1.00 and gold at $20.00 per ounce.

The summary is as follows:

Summary of Ore Reserves.

	Average Width Ft.	Tons of Ore	Per Cent Waste	Tons of Ore & Waste	Total Value U.S.C.	Value at Mill U.S.C.
Calculated Ore..	2.4	12,452	27.5	17,190	$994,099	$57.84
Ore on Dump...	..	.....	...	1,000	50,000	50.00
Total		12,452		18,190	$1,044,099	$57.40 Average

Mill.

The mill is practically completed, and we are awaiting only a few parts of machinery before commencing operations. After careful tests it was found that the Flotation Process is most suitable to the ore; this was therefore adopted. The mill was constructed for 35 tons per day capacity, and contains the following machinery:

1 100 H.P. Fairbanks-Morse Fuel Oil Engine
1 Blake Crusher
1 4 ft. x 6 ft. Ball Granulator
1 Dorr Classifier (single)
1 Callow Cone
3 K. & K. Flotation Cells
1 24 ft. x 10 ft. Dorr Thickener
1 Bucket Elevator
1 6 ft. x 4 ft. Oliver Filter
3 Pumps
2 18 ft. x 8.5 ft. Water Tanks
1 Concentrate Dryer

Note—Where dimensions are given the first figure represents the diameter.

Should actual working conditions warrant an increase in the daily milling tonnage, most of the additional mill machinery for this purpose can be supplied from Rosario.

Other Construction.

Besides the mill other suitable buildings have been erected and fully equipped. These are:

One building housing laboratory and furnace room;
One building for General Office and Engineering Room;
One building containing 7 living rooms;
One shed for blacksmith and machine shop;
One 3-room dwelling house for manager;
One 7-stall stable;
One warehouse.

Power.

As closely as can be estimated about one-third of the milling cost will be for power. Fuel oil is a very costly article at Sabana Grande and, while now that the war is over, it may be possible to obtain it more cheaply direct from oil burning steamers or from Salvador, the power item will always be a very heavy one.

The three 50 H. P. oil driven air compressors rendered fairly satisfactory service, but their upkeep cost has been high, as is usual for this type of engine.

General.

The Flotation mill is the first of its kind in Central America. We have every reason to believe that it will prove successful and at this time next year we will be able to give you full data as to actual performance.

Santa Rosa de Potosi.

Location: Department of Choluteca.

The option on this property expired last August, and as upon examination of the development work this held out but little hope for ore, the option was not exercised and work permanently stopped. The total expenditures during the year amounted to $13,555.

Aurora: Santa Elena.

Location: Zone is adjacent to that of Rosario, to the South.

Option was taken on the Aurora-Santa Elena group last June and a small amount of work is being done. Were this property not adjacent to Rosario work thereon would not be advisable, but under the circumstances the prospecting being done is well warranted. The expenditures since the option was taken are $5,027.

Government.

The Company has continued to enjoy most hearty co-operation of His Excellency Dr. Francisco Bertrand, the President, as well as that of his Cabinet.

Due to abnormal conditions most of your shipments arrived at the port of Amapala before the mail bringing the necessary documents or specifications, and while the Government could justly have held our goods until such documents were presented it chose the opposite course by releasing shipments promptly as in normal times. Owing to the small stock of vital supplies on hand such delays could well have caused your enterprise to suspend operations more than once, therefore the fullest thanks is due the Government for the broad-minded policy they have pursued in this matter.

Visit of the Officers of the Company.

Your Vice-President, Mr. J. M. De Hart, visited the property last spring. All pending questions were taken up with him and every facility offered to become acquainted with the several changes instituted. The verbal interchange of ideas between your office and the management in Honduras makes the latter feel closer to your desires and should therefore permit closer co-operation.

Conclusions.

The year just closed has been one of many trials. The malicious dynamiting of the San Juancito and Guadalupe power plant pipe lines on two different occasions, and the influenza epidemic in October, caused very serious delay both to the mine and mill which naturally had its corresponding effect upon the production. In spite of this, and, thanks to the rise in silver, the production is $108,244 greater as compared with 1917.

The question of adequate supplies was one of continuous concern to your staff throughout the year, and more than once had there been delay in steamers of only several days it would have meant a complete shut-down. The gratifying outcome and the termination of the war, however, puts all these difficulties into the past, and we therefore look forward to the coming year as one of brighter prospects. The development of the

mine and bullion production are the two most important subjects. As there is every reason to expect that silver will maintain its present value for at least another year we hope to make the production for the coming year at least equal to that of the year past.

With regard to development of the mine, the 40 years of continuous production has reduced the opportunity for development on a large scale to the Southern, Southeastern and Southwestern sections. This territory is very extensive and exploration which has been going on therein in the past four years has already disclosed evidence which leads to the opinion that it may become an important ore producer in the future.

We expect to mill at a greater rate than ever before and find the ore reserves sufficiently ample to permit this. The constant shortage of underground labor is the most serious problem we have to face, as it has often a material effect upon the grade of ore mined, therefore, upon the production. The labor must then be so distributed that maximum results are obtained, and this your staff constantly strives to do.

Your staff takes this opportunity to thank you for your hearty co-operation during the year just closed, without which the work covered by this report could not have been executed.

Respectfully submitted,

A. R. GORDON,

General Manager.

Broken Ore in Stopes.
December 31, 1918.
Totals by Veins.

Veins	Tons
Rosario	5,549
San Joaquin	4,872
San Miguel (North)	1,280
San Miguel (South)	1,006
Capitana	30
Socorro	3,257
Crisanta	650
Candelaria	3,943
Colonia	1,060
Guadalupe	980
Buena Ventura	2,231
GRAND TOTAL	24,858

Summary of Calculated Ore Reserves
(At 13 cu. ft. per ton).

VEINS	Average Width Ft.	Tons of Ore	Per Cent. Waste	Tons of Ore & Waste	Total Value U.S.C.	Value at Mill U.S.C.
South San Miguel	1.7	44,290	40	73,816	$1,328,688	$18.00
North San Miguel	1.7	5,389	51	10,997	168,254	15.30
San Joaquin	1.0	8,161	60	20,400	243,780	11.95
Culebra	1.3	2,033	57	4,727	90,758	19.20
South West	2.1	6,038	30	8,625	187,248	21.71
North	.5	1,013	51	2,066	33,572	16.25
Catalina	.6	801	70	2,670	52,279	19.58
		67,725		123,301	$2,104,579	$17.07 Average

Summary of Estimated Ore Reserves
(At 13 cu. ft. per ton).

Buena Ventura	5,000	$70,000	$14.00
Candelaria	8,000	104,000	13.00
Colonia	3,000	45,000	15.00
Esperanza	1,000	13,000	13.00
Guadalupe	1,500	18,000	12.00
Nueva	1,400	18,200	13.00
North West	5,000	75,000	15.00
Rosario	15,000	210,000	14.00
Crisanta	2,000	28,000	14.00
West	4,000	60,000	15.00
Jucuara	4,000	52,000	13.00
Capitana	1,500	21,000	14.00
Socorro	3,000	45,000	15.00
Stringers	3,000	42,000	14.00
	57,400	$801,200	$13.96 Average

Summary of Estimated Fills (At 17 cu. ft. per ton).

West	24,000	$312,000	$13.00
Guadalupe	26,000	338,000	13.00
Buena Ventura	3,000	39,000	13.00
North West	3,000	39,000	13.00
Nueva	2,000	26,000	13.00
Rosario	10,000	130,000	13.00
Candelaria	9,000	117,000	13.00
TOTAL	77,000	$1,001,000	$13.00 Average

Summary.

Calculated Ore	123,301	$2,104,579	$17.07
Estimated Ore	57,400	801,200	13.96
Estimated Fills	77,000	1,001,000	13.00
Broken Ore in Stopes (at 21 cu. ft. p. ton)	24,858	372,870	15.00
TOTAL	282,559	$4,279,649	$15.15 Average

Estimated content per ton—Ag. 13.75
Au. .07

Note—These Reserves are based on Silver at $1 per oz. and Gold at $20 per oz.

Annex "C."

VEINS	1918 Reserve (Including Broken Ore in Stopes)	1918 Production (Including Broken Ore in Stopes)	Tons Left for 1919 (Exclusive of New Reserves)	Tons Produced in Excess of Total 1918 Reserve
Buena Ventura	12,139	12,071	68	....
Candelaria	13,229	10,895	2,334	....
Catalina	2,699	....	2,699	....
Colonia	3,469	4,241	....	772
Capitana	2,719	1,120	1,599	....
Esperanza	1,000	332	668	....
Guadalupe	3,982	4,644	....	662
Jucuara	4,000	....	4,000	....
Nueva	1,400	....	1,400	....
North	2,066	....	2,066	....
North West	6,109	1,359	4,750	....
Rosario	24,003	13,988	10,015	....
Socorro	4,333	6,918	....	2,585
South West	4,606	152	4,454	....
San Joaquin	22,881	12,478	10.403	....
San Miguel (North) and Concepción	13,650	7,686	5,964	....
Culebra	2,049	1,380	669	....
Crisanta	2,443	1,843	600	....
South San Miguel	68,519	17,545	50,974	....
West	5,000	2,950	2,050	....
Stringers	3,000	72	2,928	....
TOTALS	203,296	99,674	107,641	4,019

Stope Fills.

Candelaria	10,000	1,246	8,754	....
Guadalupe	15,000	9,125	5,875	....
Rosario	15,000	3,026	11,974	....
Buena Ventura	5,000	8,886	....	3,886
North West	5,000	8,601	....	3,601
Nueva	5,000	2,210	2,790	....
West	45,000	14,500	30,500	....
San Miguel	....	132	....	132
TOTALS	100,000 tons	47,726 tons	59,893	7,619

Development.

Development Ore from Various Veins.....	....	7,358	....	....
GRAND TOTAL	303,296	154,758	167,534	11,638 tons

Annex "D."

Development for Year—1918.

Veins	Drifts	Raises	Crosscuts	Shafts	Totals
San Miguel (North)..	131.0	64.5	191.5	11.5	398.5 feet
San Miguel (South)..	2,828.5	1,833.5	632.0	22.0	5,316.0 "
Culebra	463.5	....	12.0	....	475.5 "
Socorro	108.5	....	....	....	108.5 "
South West (Clarke Tunnel)	....	....	211.0	....	211.0 "
Esperanza Crosscut...	623.0	63.0	250.0	....	936.0 "
Buena Ventura	910.0	186.5	19.0	....	1,115.5 "
Concepción	463.5	....	....	36.5	500.0 "
West	9.0	....	....	....	9.0 "
Candelaria	551.0	6.0	71.5	....	628.5 "
Nueva	63.0	....	22.5	....	85.5 "
North West.....	106.0	....	10.5	....	116.5 "
Colonia	....	....	638.5	....	638.5 "
Crisanta	....	....	6.0	113.5	119.5 "
San Joaquin	191.5	....	....	....	191.5 "
Rosario	328.5	52.0	8.0	....	388.5 "
Guadalupe	27.5	....	....	....	27.5 "
TOTALS	6,804.5	2,205.5	2,072.5	183.5	11,266.0 "

Annex "E."

Vein Production—1918.

Dry Tons.

VEINS	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
San Miguel (North)...	761	922	663	437	506	753	490	514	239	346	281	361	6,273
San Miguel (South)...	1,108	803	1,071	1,482	1,270	1,402	1,646	1,476	1,684	1,272	1,646	1,679	16,539
Candelaria	429	356	475	458	716	554	364	492	598	797	894	819	6,952
Colonia	153	252	...	124	386	511	647	568	280	68	94	98	3,181
Culebra	152	27	56	77	60	3	116	148	38	163	353	187	1,380
Buena Ventura	444	1,178	894	1,180	946	1,112	722	863	588	501	654	758	9,840
Rosario	351	275	476	635	971	407	514	940	1,045	560	1,156	1,109	8,439
West	260	131	263	267	263	269	298	371	252	204	199	173	2,950
North West.....	501	203	404	159	...	...	...	37	36	9	2	8	1,359
San Joaquin.....	1,127	421	369	1,034	976	259	766	482	662	563	357	590	7,606
Guadalupe	285	158	201	43	5	170	283	295	837	616	460	311	3,664
Capitana	93	22	229	229	12	292	5	2	121	...	...	85	1,090
Crisanta	19	91	...	39	62	17	...	49	266	205	292	153	1,193
Esperanza	...	...	...	...	...	...	...	3	...	...	155	174	332
Socorro	282	381	613	105	427	276	233	261	31	214	474	364	3,661
Porvenir	...	...	...	...	...	...	...	...	...	...	...	72	72
South West	42	19	69	22	...	...	...	...	...	...	...	...	152
Concepción	...	...	...	...	...	...	...	...	...	...	29	104	133
Ore from development.	666	618	151	178	274	336	609	618	681	723	1,004	1,500	7,358
TOTALS	6,673	5,857	5,934	6,469	6,874	6,361	6,693	7,119	7,358	6,241	8,050	8,545	82,174

Annex "F."

Fill Production—1918.

VEINS	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Guadalupe	1,705	1,455	1,076	771	193	765	792	806	610	230	280	442	9,125
West	1,140	733	948	835	1,333	1,128	1,306	1,262	1,412	1,295	1,397	1,711	14.500
North West.....	220	319	383	411	1,175	1,101	933	781	508	744	972	1,054	8,601
Buena Ventura.....	762	942	737	504	830	684	809	907	771	570	698	672	8,886
Nueva	256	330	261	136	179	126	333	276	123	88	40	62	2,210
Rosario	110	512	418	355	269	257	178	153	150	280	183	161	3,026
Candelaria	102	152	43	19	147	78	156	96	168	152	80	53	1,246
San Miguel	132	...	...	...	...	...	...	...	...	...	...	...	132
TOTALS	4,427	4,443	3,866	3,031	4,126	4,139	4,507	4,281	3,742	3,359	3,650	4,155	47,726

Summary.

Total vein production.....	82,174	dry tons
Total fill production.....	47,726	" "
GRAND TOTAL PRODUCTION.....	129,900	" "

New York & Honduras Rosario Mining Company. Income and Profit & Loss Statement for the Year Ended December 31, 1918.

Production of Silver and Gold	$1,803,751.79	
Less—Freight and Expense on Bullion	75,778.34	
Operating Income		$1,727,973.45
Operating Expense		1,057.863.39
Operating Profit		$670,110.06
New York Administrative Expense		100,528.08
Net Income from Operating		$569,581.98
Other Income		16,439.84
Total Income		$586,021.82
Deductions from Income—		
Interest, Taxes, Investigation of other properties, and Losses on Investments		128,917.48
Net Profit for Period		$457,104.34
Appropriated for Reserves—		
Depreciation	$65,068.17	
Obsolete Inventory	11,444.58	
Fire Insurance	3,600.00	
		80,112.75
Profit and Loss Balance—Carried to Surplus		$376,991.59
Add—Adjusted Surplus Balance, January 1, 1918		2,581,824.00
TOTAL		$2,958,815.59
Deduct—Reserve for Depletion of Mines in 1918	$324,750.00	
Dividends paid in 1918	200,000.00	
		524,750.00
Surplus Balance, December 31, 1918		$2,434,065.59

New York & Honduras Rosario Mining Company.

Balance Sheet December 31, 1918.

ASSETS

Mines, Real Estate and Concessions	$3,000,000.00	
Buildings, Plant and Equipment	1,135,859.10	
Investments: Stocks of other Companies	44,853.00	
Advances—to other Companies	92,405.34	
Insurance Fund	15,114.26	
		$4,288,231.70
Cash and Cash Items	$346,284.99	
Liberty Bonds	323,500.00	
Bullion in Transit	387,348.23	
Broken Ore in Stopes and Ore in Mill Bin	112,125.43	
Materials and Supplies	401,343.05	
Notes and Accounts Receivable	60,264.66	
		1,630,866.36
Deferred Charges to Operating	$37,084.51	
Accrued Interest Receivable	2,419.18	
		39,503.69
TOTAL ASSETS		$5,958,601.75

LIABILITIES

Capital Stock—		
200,000 Shares Par Value $10.00		$2,000,000.00
Notes, Drafts and Accounts Payable		672,854.10
Accrued Interest Payable and Deferred Credits		5,935.17
Reserves—		
For Depreciation	$422,789.33	
For Depletion (after deducting $200,000.00 distributed to Stockholders in 1918)	260,505.86	
For Exchange Fluctuations	131,753.75	
For Taxes	15,583.69	
For Insurance	15,114.26	
		845,746.89
Surplus—Including increase in valuation of mines to comply with Government regulations amounting to $755,737.38, after deduction of reserve for depletion set aside to date		2,434,065.59
TOTAL LIABILITIES		$5,958,601.75

We have audited the books of account of New York & Honduras Rosario Mining Company, kept at the New York Office, and, with the exception of the Honduras Inventories of Materials and Supplies, which have been verified only as to extensions and footings, we *HEREBY CERTIFY* that the above Balance Sheet is, in our opinion, a correct statement of the financial status of this company at December 31, 1918.

BANKERS & MERCHANTS ACCOUNTING COMPANY,
By ARTHUR P. MONK,
Certified Public Accountant (N. Y.)

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
Total	$26,204,027.53

Dividends Paid

1887 No. 1	$37,500— 2½%
1888 Nos. 2 to 5	60,000— 4 %
1889 Nos. 6 to 14	150,000—10 %
1891 Nos. 15 to 16	30,000— 2 %
1892 Nos. 17 to 21	165,000—11 %
1893 Nos. 22 to 25	150,000—10 %
1894 No. 26	37,500— 2½%
1896 Nos. 27 to 28	30,000— 2 %
1897 Nos. 29 to 40	180,000—12 %
1898 Nos. 41 to 48	120,000— 8 %
1899 Nos. 49 to 60	180,000—12 %
1900 Nos. 61 to 75	225,000—15 %
1901 Nos. 76 to 93	300,000—20 %
1902 Nos. 94 to 100	105,000— 7 %
1903 No. 101	15,000— 1 %
1904 Nos. 102 to 108	105,000— 7 %
1905 Nos. 109 to 121	180,000—12 %
1906 Nos. 122 to 139	285,000—19 %
1907 Nos. 140 to 153	210,000—14 %
1908 Nos. 154 to 165	180,000—12 %
1909 Nos. 166 to 173	120,000— 8 %
1910 Nos. 174 to 180	105,000— 7 %
1911 Nos. 181 to 182	90,000— 6 %
1912 No. 183	30,000— 1½%
1913 Nos. 184 to 188	220,000—11 %
1914 Nos. 189 to 193	240,000—12 %
1915 Nos. 194 to 197	240,000—12 %
1916 Nos. 198 to 205	400,000—20 %
1917 Nos. 206 to 211	300,000—15 %
1918 Nos. 212 to 215	200,000—10 %
Total	$4,690,000

Amortization Distributions 1917 No. 1	100,000— 5 %
" " 1918 Nos. 2 to 5	200,000 10 %
Dividends 1 to 182 inclusive, on Capital Stock	$1,500,000.00
Dividends 183 to 211 inclusive, on Capital Stock	2,000,000.00
Amoritzation Distribution, No. 1 to 5 inc., on Capital Stock	2,000,000.00

REPORT *of the*

NEW YORK & HONDURAS ROSARIO MINING CO.

1919

NEW YORK

January 1, 1920

OFFICERS 1920-1921

WM. A. PRENDERGAST, *President.*

H. A. GUESS, *Vice-President.*

A. R. GORDON, *Vice-President.*

W. C. LANGLEY, *Treasurer.*

J. PERLMAN, *Secretary.*

BOARD OF DIRECTORS 1920-1921

LEWIS L. CLARKE, *Chairman.*

SIDNEY ABBEY,	W. C. LANGLEY,
H. A. GUESS,	WM. A. PRENDERGAST,
ALFRED V. GUIDET,	W. L. SAUNDERS,
IRVING HEIDELL,	M. F. SOTO,
J. C. F. JACOBY,	AMBROSE G. TODD,

P. R. WEILER.

EXECUTIVE COMMITTEE 1920-1921

LEWIS L. CLARKE, *Chairman.*

SIDNEY ABBEY,	ABBROSE G. TODD,
H. A. GUESS,	P. R. WEILER,
W. L. SAUNDERS,	

WM. A. PRENDERGAST
W. C. LANGLEY } *Ex-officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company

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New York, January 1, 1920.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

The year 1919 *will be recorded as the period in which the price of silver advanced to a figure unprecedented in the last half century. This advance was due to the removal of all governmental restrictions of a price fixing and traffic regulative character, permitting entire freedom in the marketing of the commodity. This company, like all others engaged in the mining of silver, has been the beneficiary of these new conditions arising out of the great demand for this metal.*

In addition to the favoring influences due to the high price of silver, the Company's business moved very smoothly. The relaxation consequent upon the conclusion of world hostilities manifested itself in the greater facility with which it was possible to conduct one's affairs, although the trend of prices for supplies continued unduly high.

It has always been the policy of this Company to publish a most comprehensive report of its affairs, especially its operations in Honduras. The particularity with which all matters of concern

to the business are narrated in the General Manager's report, enables the stockholders to acquire an intimate knowledge of the work accomplished and the nature and value of the Company's holdings. The General Manager's report which is submitted herewith affords a most informing picture of the work done during the year 1919, *and as far as it is possible to describe it, the work it is intended to do in the future.*

I desire to call attention to some of the significant points in the operations of the year 1919:

The tonnage milled was 133,900 *tons, compared with* 129,900 *tons for* 1918, *or an increase of* 4,000 *tons.*

The development driven was 15,900 *feet, compared with* 11,266 *feet for* 1918, *an increase of* 4,634 *feet.*

The reserves reported as of December 31, 1919, *were* 283,422 *tons, compared with* 282,559 *for* 1918, *or an increase of* 863 *tons.*

The estimated value of the reserves for December 31, 1919, *was* $4,279,649, *compared with* $3,812,419 *for* 1918, *or a reduction of* $467,230.

The value of the production for 1919 *was* $2,115,158.25 *compared with* $1,803,751.79, *or an increase of* $311,406.46.

The Company's books have been audited by the Bankers' and Merchants' Accounting Company. The Balance Sheet and Income and Profit and Loss Statement as of December 31*st are submitted as part of this report. The Company's surplus account has been increased during the year* $223,389.83.

The following comparative statement for 1918 *and* 1919 *gives for those years the general per ton costs of all branches of the business:*

INCOME FROM OPERATIONS

Tons		January 1, 1918, to December 31, 1918	Per ton	Tons	January 1, 1919, to December 31, 1919	Per ton
129,900	Production of Gold and Silver.....	$1,803,751.79	$13.89	133,900	$2,115,158.25	$15.79
	Less—Freight and expense on bullion	75,778.34	.58		62,065.30	.46
129,900	Gross Income	$1,727,973.45	$13.31	133,900	$2,053,092.95	$15.33

OPERATING EXPENSE

129,984.12	Mining	573,994.55	$4.41	133,910	679,500.61	5.07
	Milling	371,014.49	2.86		355,844.86	2.65
	Total Mining and Milling.....	$945,009.04	$7.27		$1,035,345.47	$7.72
84.12	Deduct—Adjustment of Ore in Mill Inventory	779.63		10	673.58	
129,900	.....	$944,229.41	$7.27	133,900	$1,034,671.89	$7.72
	Mine Administrative Expense.....	178,479.65	1.37		162,449.16	1.21
	New York Administrative Expense..	100,750.58	.77		76,368.28	.57
129,900	Total Operating Expense	$1,223,459.64	$9.41	133,900	$1,273,489.33	$9.50
129,900	Net Operating Income.....	$504,513.81	$3.90	133,900	$779,603.62	$5.83

Your attention is invited to the following comparison of the principal elements of expenditures. The charges for freight and expense on bullion were

1918	$75,778.34	
1919	62,065.30	*or a reduction of*
	$13,713.04	

For Mining and Milling

1918	$945,009.04	
1919	1,035,345.47	*an increase of*
	$90,336.43	

For Mine Administration

1918	$178,479.65	
1919	162,449.16	*a reduction of*
	$16,030.49	

For New York Administration

1918	$100,750.58	
1919	76,368.28	*a reduction of*
	$24,382.30	

The continued high levels of prices for supplies account for the increase in the charges for operating the mine and mill. It will be noted that in both administrative departments there were considerable reductions.

Dividends of $200,000 *and a distribution of* $200,000 *from the Depletion Reserve Account were paid to the stockholders during the year* 1919. *These disbursements represent a gross payment of twenty per cent on the capital stock, being the same percentage paid during the years* 1916, 1917 *and* 1918.

My personal inspection of the Company's property showed it to be in a commendable state of efficiency. At the same time, it must be borne in mind that there are a considerable number of improvements and renovations that must be undertaken. The latter are referred to in the General Manager's report.

The Company's concession from the government of Honduras expires December 31, 1920. *The necessary petition for the renewal will be presented to the Executive and Congress of Honduras at the legislative session commencing January* 1, 1920.

In accordance with its expansion policy the company has under consideration certain properties but no new properties have been acquired during 1919.

I am pleased to state that the Sabana Grande-Honduras Mining Company, in which this Company secured a majority interest in 1917, *has been in active operation since March* 1, 1919. *The results of this operation to date indicate that the moneys advanced for the development and operations of the so-called Sabana Grande proposition will probably be repaid by July* 1, 1921, *and a respectable dividend realized from the undertaking.*

It is befitting to express to the Government of Honduras our appreciation of the courtesy and helpfulness with which the Company's affairs have been treated. We also extend to the officials and staff of the Company in Honduras a special acknowledgment of appreciation of their unvarying loyal and conscientious service.

WM. A. PRENDERGAST,
President.

Annual Report of the General Manager

San Juancito, Honduras, January 1, 1920.

To the President:

17 Battery Place, New York, N. Y.

Dear Sir:

The following résumé of work done on the Company's mining interests in Honduras during the fiscal year closing December 31, 1919, is presented for your consideration and approval.

Note: Where value of silver and gold is considered, silver is taken at $1.00 per ounce and gold at $20.00 per ounce. All figures representing money are in United States currency.

PRODUCTION

	1919	1918
Dry Tons Treated	133,900	129,900
Ounces silver produced	1,584,579	1,587,468
Ounces gold produced	10,200	9,748
Ratio of silver to gold	155	164

This product was shipped to New York and represented 1014 bars Doré bullion, averaging 979.94 silver and 6.31 gold fine.

Compared with the year 1918 the silver production is 2,889 ounces less, but so far as value is concerned it is more than compensated by an increase in the gold output of 452 ounces. The production for 1919, therefore, is $1,788,579, as compared with $1,782,428 for the year previous, showing an increase for the year 1919 of $6,151.

The policy of making up the decreasing precious metal content in the ore by increasing the tonnage put through the mill has met with success. Thus, compared with 1918, 4,000 tons more were milled, which resulted in the slightly increased production in 1919, already noted, though the average grade of the ore was $15.435 as against $15.686 and the recovery of silver slightly lower, due to more refractory ore.

A slight improvement in the ratio of silver to gold will be noted, one ounce of gold being produced with every 155 ounces

silver as compared with 164 ounces silver for the year previous. This improvement is not due to new gold discoveries, but to ore production from greater gold-bearing sections of the mine which were not accessible in 1918. During the coming year we expect to maintain about the same ratio.

THE MINE

Ore Reserves

The following is a summary of the total ore reserves existing on January 1, 1920, and shown in detail on Annex "A."

In calculating these reserves an average mining width of 3½ feet is assumed. The value of silver is taken at $1.00 U. S. currency per ounce and gold at $20.00 U. S. currency per ounce.

Summary

	Tons of Ore and Waste.	Total Value, U.S.C.	Value per ton at Mill, U.S.C.
Calculated ore in place at 13 cu. ft. per ton	164,986	$2,366,623	$14.34
Broken ore in stopes at 21 cu. ft. per ton	17,536	217,096	12.38
Estimated ore in place at 13 cu. ft. per ton	41,400	574,200	13.87
Vein fills in place at 17 cu. ft. per ton	59,500	654,500	11.00
Totals	283,422	$3,812,419	$13.45 average

Estimated content per ton:
Silver 12.25 ozs.
Gold .06 ozs.

Though 133,900 tons, having a gross value of $2,066,831, were mined in the past year, the present reserves when compared with those submitted on January 1, 1919, show an increase of 863 tons and a decrease of $467,230 in gross value. The average value per ton, $13.45, is $1.70 lower than that of the 1919 reserves, but an increased milling rate and better silver recovery is expected during the coming year which should compensate very materially for the treatment of the lower grade ore.

Your attention is drawn to the reserve of 12,053 tons, having a gross value of $220,096 in the El Carmen vein, a new find

encountered by the Esperanza Cross-cut in September, 1918. The Culebra vein shows a reserve of 21,735 tons, averaging $10.79 per ton, and this value is the lowest of the total reserves. But the Culebra lends itself to cheap mining; therefore the profit obtained from its ores should be as great as that from ores considerably richer but where mining conditions are less favorable.

The reserve tonnage of 74,127 in the South San Miguel is slightly greater than shown a year ago, though when the gross value is compared it is $290,275 less. This is due to the 25,911 tons of ore mined in the year past being replaced by ore of lower grade and the necessity of decreasing the average value of the reserve due to adverse mining conditions in this vein.

The stope fill reserve is steadily decreasing and as the workings in which it exists have been gone over quite completely, there is no possibility of substantially new finds. There is still a large quantity of fill material, either too low in grade or too distant from haulage ways to consider as a reserve. In the first case, efforts are being made to determine if a sufficient amount of fill exists to warrant the installation of a plant to assort the waste and thus bring it up to paying grade. In the second case some of the fill now not economically accessible may become so should development operations reopen any of the sections in which it exists.

On Annex "B" is shown the relation between the 1919 reserve and the ore stoped in that year. In several cases ore production was considerably in excess of the reserve and in others closely approaching it. This indicates that our calculations and estimates were well within safe limits. We can state that the same degree of accuracy and conservatism were applied in determining the reserves as existing on January 1, 1920.

The longitudinal sections of the principal veins submitted with this report show the location of most of the calculated ore.

DEVELOPMENT

Distribution of development in the various veins is shown on Annex "C," of which the following table is a summary:

Footage Made

Year	Drifts	Raises	Cross-cuts	Shafts	Total
1918	6,804.5	2,205.5	2,072.5	183.5	11,266.0 ft.
1919	10,904.0	3,145.5	1,851.0	None	15,900.5 "
Increase in 1919	4,099.5	940.0	221.5	....	4,634.5 ft.

We draw your particular attention to the very material increase in development footage with a decrease in cost of 20 cents per foot as compared with the year previous. The largest amount of development in any one vein was in the South San Miguel, in which 33.7 per cent of the total, or 5,362.5 feet, were driven. Next in this respect is the Carmen vein with 1,955.5 feet against no footage in 1918, it having been intersected in the latter part of that year. One of our long discovered veins, the Culebra, was also extensively developed in the past year, the footage being 1,846 feet, as compared with 475.5 feet in the previous year.

Our most important development project, the Esperanza Cross-cut, which is penetrating unexplored territory, was advanced 517.5 feet, as compared with 250 feet in 1918. Some interesting possibilities have been disclosed and reference to these is made under the heading of "Esperanza Cross-cut."

The stope fills, which have proved so profitable, are nearing exhaustion. In the past three years they have represented nearly 30 per cent of the total tonnage milled, and when no more fills are available this percentage will have to be made up with ore broken from veins if there is to be no decrease of the present milling rate. Everything possible is being done to meet this anticipated material increase in ore requirements and the increase in development already effected is the most important step in this direction.

The amount of development footage per month is still governed more by the lack of efficient labor than by sources warranting development. Consequently, the better prospects are given preference wherever possible.

Ore Production

On Annexes "D" and "E" is shown in detail the production of three classes of ore from each vein worked. The comparative summary is as follows:

	1919	1918
Ore broken from veins	92,167 tons	74,816 tons
Ore from development of veins	12,117 "	7,358 "
Stope fill material	29,718 "	47,726 "
Total produced and milled	134,002 tons	129,900 tons
Percentage fill produced	22.2	36.7
Number of producing veins	16	18

The South San Miguel vein was again the largest single ore producer, its output being 25,911 tons as compared with 16,539 tons in 1918. With respect to fill output the West vein again holds first place, yielding 11,699 tons.

A drop of 16.5 per cent in fill production, as compared with the year previous will be noted. This is not due entirely to the approaching exhaustion of the fills, mentioned under another heading, but to the limit placed by the Reduction Works, owing to their somewhat refractory character. Changes have been effected in the mill which will permit treatment of a considerably larger amount of fill during the coming year, should this be necessary.

Another important increase is that of ore from development. Greater vigilance than ever is being exercised in conserving ore which comes broken with the waste from the development work. Also, the high price of silver has permitted us to consider much development material as ore which under less favorable market conditions it would have been necessary to send to the waste dump.

Stoping conditions during the year were on the whole less favorable than for several years past. Our largest producer, the South San Miguel, is of such character as to not permit the adoption of the cheap and efficient ore fill method of stoping. Loose ground and the disseminated nature of this vein make it necessary to stope on top of a waste fill which has to be prepared at no little cost. A good deal of assorting of waste from the ore has to be done in the stopes and a very general use of machine drills cannot be resorted to. This has had a twofold adverse effect—first, by increasing the total stoping cost per ton of the entire mine, this being $2.84 as compared with $2.30 for the year previous, and, secondly, by decreasing the broken ore in stopes reserve by about 7,000 tons. The same unfavorable stoping conditions will probably obtain in the South San

Miguel during the coming year, but we look for some partial compensating features from the Culebra vein which it is expected will be stoped at a heavy rate and in which cheap stoping is permissible.

Veins Worked in the Year 1919

The discussion of the various veins is supplemented by maps in plan and longitudinal section submitted with this report. The assay results indicated on the maps are of vein matter only, therefore they do not represent the actual value of the ore after this is mined, but are very considerably higher.

VEINS

South San Miguel Vein

As will be seen from Annexes "B" and "C" this vein was again the largest ore producer and also the field for over 33 per cent of the total development footage in the past year.

Important ore bodies have been disclosed above the Upper 550 level and these are now being developed at the Upper 700 foot level and above. Development below the Peña Blanca level through the Lower 200 level has been slow. But there are now assurances of an important tonnage from this section and in the coming year it is expected that a good deal of the ground will be prepared for stoping.

Lateral development to the south and southeast at the Upper 250, Upper 350, Upper 450 and Upper 550 levels was continuous throughout the year. It disclosed that as the distance from the west vein increases the vein decreases both in value and, on the whole, in width, and that it divides into stringers. However, substantial ore bodies have been found which can be stoped at a fair profit.

In the latter part of the year conection was made at the Upper 250 level with the Esperanza vein workings, which now proves what has been suspected for quite some time, that the South San Miguel and Esperanza are identical.

The substantial reserve of the South San Miguel is sufficiently opened up to permit an output equal to that obtained in the year past.

Buena Ventura Vein

The production of 13,862 tons of ore and 5,405 tons of fill surpassed our expectations from this old vein by a very large margin, because in the 1919 reserve the ore was estimated at but 5,000 tons and fill at 3,000 tons.

The 1,436½ feet of development were confined principally to the levels above the Peña Blanca and a good deal of the work done was on a stringer more or less parallel to the Buena Ventura at the Upper 450 level. The present ore reserves of this vein show that this development work has been moderately successful.

It should be noted that in this vein, as similarly in all the older veins whose lateral and vertical limits have been already determined, development work is not confined to new territory, but mostly to sections between ore chutes and on the outskirts of these.

North San Miguel—Concepción

Most of the development in the North San Miguel was for the purpose of locating it below the 300-foot level. This work met with no success. A small amount of drifting was done to the north in the stope above the Upper 700-foot level, which is adjacent to the west vein. This drift has been called the Upper 900-foot level. A small amount of ore was encountered, but at the present time the heading is in waste. Most of the 5,532 tons of ore produced come from the Lower 200-foot level stope adjacent to the San Joaquín vein, and the Upper 150-foot level stope adjacent to the west vein. The remainder of the ore came from the Upper 250-foot level stringer stope and from various pillars in the vein. Though the North San Miguel has been thoroughly developed there are pillars between stopes and a section above the 550-foot level which will warrant further investigation.

The Concepción and North San Miguel are the same vein. For convenience the section between the west vein and San Joaquín vein was named North San Miguel and that between the San Joaquín and the surface, Concepción.

No development or stoping was done in the Concepción last year.

Rosario Vein

Of the 11,529 tons of ore produced by this vein in the past year about 70 per cent came from the Lower 400-foot level between Blocks 31 and 41, inclusive. This ore was on the whole below the average in grade and quite refractory to treatment. However, this was counter-balanced by cheaper mining and haulage costs. The remaining 30 per cent came from above the Peña Blanca level and was of considerably better grade.

The Rosario vein produced no fill during the year, but some workings in which fill is known to exist have been recovered. Therefore it is expected that during the coming year a moderate amount of this will be produced.

Of the 465 feet of development, over half was done at the Lower 400-foot level from Block 45 westward, but results proved disappointing. Most of the remaining footage was made at the Zero level between Blocks 40 and 45. While actually no ore was found, there are indications that with further development work a moderate quantity can be expected. There is considerable territory remaining between levels and stopes warranting recovery and development, and work is continually in progress opening it up.

Northwest Vein

The 747 feet of development work done was confined to the Zero level and the Upper 450-foot level; at the latter place part of it on stringers off the vein. At the Zero level, between Blocks 47 and 49, a body of high grade ore has been opened up whose exact lateral limits at this date cannot be determined. Existing in the old workings we know that the quantity of ore ultimately obtainable will be limited, though the probabilities are for a stope at least 200 feet long which will extend nearly to the Peña Blanca level.

The production of ore amounted to 1,307 tons and of fill 5,947 tons. Most of the ore came from stope at the Lower 200-foot level in Block 49.

Guadalupe Vein

Though only 1,500 tons of ore were estimated for the 1919 reserve, the actual output was 2,193 tons and in the reserves

presented herewith we estimate at 1,000 tons of $12.00 ore. The fill output from this vein had to be decreased owing to its character being such that it would cause difficulty in treatment. Several limited sections of this vein remain to be recovered and developed.

Candelaria Vein

This vein was a heavy producer of ore in the year past, its output being 9,144 tons, though only 8,000 tons were estimated. All of this ore came from the Zero level and below. The fill output was 1,457 tons and came from above the Zero level. Recovery work on the Upper 250 and Upper 350-foot levels was continuous, and it is now sufficiently advanced to permit a heavier output of fill should this be required. There are possibilities for ore above the 500-foot level, but owing to the large amount of preliminary recovery work still necessary, it will not be possible to do actual development in the coming year. The development done during the year was all below the 300-foot level, where an important quantity of gold-bearing ore was disclosed.

Southwest Vein

In the past year no stoping or development was done in this vein. Development will commence as soon as either the Lower 300 or Lower 650 West vein headings penetrate the territory below its present workings.

West Vein

The West vein was again our largest producer of fill, of which 11,699 tons were obtained, it all coming from the workings above the Upper 350-foot level. The 1,324 tons of ore came mostly from pillars found after the fill was removed. The expectations were that a large amount of development would be done which would consist principally in driving the Lower 300 and Lower 650-foot levels to the West, the object being to enter the territory of the Southwest vein. It was found, however, that before the headings of these two levels could be reached, a very large amount of recovery work first had to be done. This accounts for the development in this vein only

being 71 feet. The recovery work referred to has now been completed and driving has already commenced on the Lower 650-foot level.

San Joaquin Vein

All the ore this vein produced in the past year came from below the 300-foot level. The stopes on the Lower 400-foot level in Blocks 61 and 62 produced an important quantity of good grade ore. The large stope on the Lower 650-foot level, Blocks 58 and 59, shows a wide vein, but the grade of the ore so far has been low when compared with that obtained from the levels above. As will be seen from the reserves, there is considerable ore remaining and it is expected that in the coming year this vein will be producing ore at the Lower 650-foot level and the Lower 400, both from sections east and west of the present stopes.

No development was done in the past year, but we are planning to do a moderate amount in the coming year.

The workings of this vein are very advantageously situated with respect to the Lower 650 electric haulage. Therefore, when, due to accident or other causes, the main ore chutes on this haulage are temporarily cut off, it is nearly always possible to draw a heavy tonnage from this vein immediately and thus keep the mill running.

Colonia Vein

Inasmuch as the cross-cut run for this vein at the Lower 650 level failed to intersect it, a raise was run with the expectation of finding it at not a great distance above the cross-cut. The raise reached a height of 200 feet, at which point a 65-foot cross-cut was driven which intersected the vein. Good width and values were encountered at the point of intersection, though in subsequent drifting the vein pinched to a valueless stringer. Inasmuch as the Colonia is a characteristically spotty vein, the heading to the north will be continued, as the chances are fair that some of the ore existing in the floor of the Lower 300-foot level will extend to this depth.

Two thousand two hundred and thirty-five tons of ore came entirely from pillars of the old workings at and above

the Upper 400-foot level. There are many small pillars of good grade ore still remaining and these are being removed.

Socorro Vein

The ore production, consisting of 3,493 tons, came almost entirely from the broken ore in stopes reserve reported in the 1919 reserves.

A level, called the Upper 1,000-foot, was run to the surface, a distance of 300 feet, from the large stope above the Upper 900-foot level. Small bunches of good grade ore were found, but none of them are important. The existing ore reserve as reported is located in pillars at the Upper 350, 500, 600, 700 and 900-foot levels. There never was any development or prospecting work done in this vein south of the Guadalupe vein, the supposition being that it did not exist south of the Guadalupe. In the year past, however, a drift was run south, off the Guadalupe, on a stringer which appears to be an extension of the Socorro. Similar work was also done at the Upper 700-foot level, but in each case, though good assay results were obtained, the vein is very narrow and it pinched out within a distance of 100 feet from the Guadalupe junction. Nevertheless, it is possible that a vein may still exist to the south; therefore, drifting in this direction at either the Upper 700-foot or 900-foot levels is warranted. It is also advisable to extend one of the north headings, either the Upper 700 or Upper 900, to the north.

North Vein

The North vein is a vein branching off the Guadalupe to the north and is therefore parallel to the Socorro vein. In the past it was moderately productive of very high grade ore, but in recent years no work has been done. In the latter part of last year 138 feet were driven to see if the vein could be located at the Upper 700-foot level, but this work did not produce the desired results. As all possibilities have not been exhausted, some further exploration is planned in the near future.

Nueva Vein

This vein produced no ore during the year, but 1,369 tons of fill were extracted. Development work was confined to re-

covering the drift at the Zero level. This recovery work is nearing conclusion and when the heading is reached some drifting will be done eastward to determine the ore possibilities. It is expected that moderate fill production will continue during the coming year.

Capitana Vein

Stoping was confined entirely to the Upper 550-foot level and 850 tons of ore were produced. There are places in this vein where a limited quantity of ore can still be obtained, but, inasmuch as practically no work is going on in this section of the mine, the probabilities are that this ore will not be touched until either necessity or resumption of work in the neighboring veins makes it advantageous to do so.

Forty feet of development was done on a stringer off the vein at the Upper 550-foot level, but no ore was found.

The intention is to sink on the ore body existing in the floor of the Lower 100-foot level, and probably this work will commence during the coming year.

Crisanta Vein

This vein produced 809 tons of ore, rather low in grade, and no fill.

The 137 feet of development was all done at the Upper 600-foot sub-level, entered through the winze from the Upper 700-foot level. While a vein of about a foot in width was disclosed, it is too low in grade to stope. Ore of good width and grade exists in the floor of the Upper 700-foot level and as opportunity offers it will be removed.

There are fair possibilities of developing more ore southwest of the Upper 700 and Upper 900-foot level headings; therefore, when there is an opportunity driving either one or both of these headings will be resumed.

Culebra Vein

This vein has more than come up to all our expectations both as to results from development and the quantity of ore produced. The general average of the ore is lower than that of the other veins, but it is expected that this will be compensated

by cheaper mining and treatment. Therefore, it is believed the profit will be as great as from veins yielding a higher grade but where conditions are less favorable. Development consisted of 1,846 feet as compared with 475 feet for the year previous, and was distributed mostly over drifts driven to the south at the Upper 150, 350, 450, 500, 600 and 700-foot levels. It is expected that in the coming year this vein will be as heavy an ore producer as it was in the year past. The territory ahead of the present headings is still extensive and there are good possibilities that it will disclose important quantities of ore upon development. Therefore, it is planned to continue the development of this vein as extensively in the coming year as was the case in the year just closed.

Veins Not Worked During 1919

The veins in which no work was done in the year 1919 are the San Vicente, Catalina, Jucuara, and the Los Cedros.

Outside Prospects on the Zone

One hundred and seventy-eight feet were driven on some prospects in the Escobales Gulch. High assay returns in gold were obtained, but after the drifts penetrated some distance into the mountain the stringers became barren. One or two of these stringers deserve further attention and it is expected that some further work will therefore be done in the near future.

Esperanza Cross-Cut Section

Esperanza Cross-cut

The eight years' work of driving the Esperanza Cross-cut has at last been rewarded by the intersection of veins, the development of which up to date leads to the belief that they will in the future be a very important adjunct to the ore reserves. This is particularly true of the El Carmen and Santa Fortuna veins. The cross-cut is being continued beyond the Santa Fortuna vein, as the intersection of this and the El Carmen fully indicates that we are in territory favorable to ore deposition. These two veins are under the highest portion of the mountain, which permits an extent above the Peña Blanca level of 1,100 to 1,200 feet. The same would hold true of any veins

which the Esperanza Cross-cut may cut within the next 1,000 feet. The cross-cut was advanced 517½ feet, as compared with 250 feet in 1918, and it is needless to say that in view of the important strikes of ore already made it will continue to be driven as rapidly as is possible. There are other details dealing with the cross-cut which have already been covered in previous annual reports. To mention them here would be repetition; therefore we refer you to the annual reports from the year 1912 on.

The following is a brief description of the more important veins intersected by the Esperanza Cross-cut.

Porvenir Vein

This is the third vein cut by the Esperanza Cross-cut and though no ore reserves were ever reported in the year past 213 tons of ore were stoped. A new level, the Upper 250, has been started and between this and the top of the present stope a small body of ore of good width and value exists. About 450 feet of drifting was done at the Peña Blanca level to the northwest. This work disclosed a narrow and virtually valueless stringer. The best ore possibilities in this vein exist above the Peña Blanca level, therefore the raise will be continued above the Upper 250-foot level and drifting started in the vein at the most favorable locality.

El Carmen Vein

This vein, cut by the Esperanza Cross-cut in September, 1918, was extensively developed in the past year. The advance made amounted to 1,955½ feet, most of which was made in the section of the vein southeast of the Esperanza Cross-cut. About 250 feet southeast of the Esperanza Cross-cut a body of high grade ore was encountered. It is being developed by a raise, now 200 feet in height above the Peña Blanca level, all in ore, and a drift at the Upper 250-foot level, now over 300 feet in length, most of which is in stoping ore also. A hanging wall stringer, as rich as the main vein, was encountered at the Peña Blanca level which is also being developed. The ore body is erratic in width and the ground loose, therefore the ore mined is likely to be mixed with considerable waste in spite of careful stoping. The reserves so far consist of 12,053 tons of

ore and waste, having a calculated value of $18.26 per ton at the mill. Some of the ore is now sufficiently well exposed to permit stoping and in all probability some of this will be done in the coming year. Though considerable drifting was done at the Peña Blanca level, northwest of the Esperanza Cross-cut, only a few unimportant bunches of ore have been found so far. All the ore comprising the reserves lies southeast of the Esperanza Cross-cut. The development planned for the coming year will consist in determining the vertical and lateral extent of the ore body found, but at the same time both the southeast and northwest headings at the Peña Blanca level will be driven, as the territory ahead of each is very extensive and we believe the possibilities for another ore body to be good, especially to the southeast.

Santa Fortuna Vein

After the El Carmen this is the next vein to be cut by the Esperanza Cross-cut, the distance between the two being about 220 feet. Development up to date consists of 165½ feet and shows the vein to be very erratic in width, though existing in more firm ground than the El Carmen. As yet not much can be said with regard to values, but very high assay results have been obtained, which indicate that this vein is certainly ore bearing. Experience with the Porvenir and the El Carmen veins indicates that the Esperanza Cross-cut is below the zone of highest mineralization. This leads us to believe that development of this vein above the Peña Blanca level will give more satisfactory results. We consider the Santa Fortuna an important strike.

Future Development

Development work in this mine embraces two important branches; first, that of opening up to a greater extent veins already found, and secondly, looking for new veins. There are good prospects of finding more ore and in important quantities in the El Carmen, Santa Fortuna, South San Miguel and Culebra veins. Work in them should consequently be pushed to the fullest extent. The other branch of development, that of looking for new veins, embraces such projects as the Esperanza Cross-cut. In the light of the present knowledge of the

mine the territory ahead of the Esperanza Cross-cut offers the best possibilities for new veins. Driving this cross-cut should, therefore, be given the preference over all similar work.

MINE EQUIPMENT

Air Compressors.

Very satisfactory and dependable service was rendered by the two air compressors which have now been in continuous operation since 1909. In 1915 these compressors were equipped with larger cylinders, which increased the capacity of each from 1,725 to 2,120 cubic feet free air per minute and the load on each electric motor from 280 to 416 horsepower. No abnormal wear or deterioration has been noticed in either the electrical equipment or the compressors due to this material overload, so there is every reason to believe these machines will continue to be serviceable for many years to come.

Air Piping and Track.

The unprecedented high cost and difficulty of obtaining materials during the war caused us to hold back orders for pipe and rails. The result is that the continuous use of the present pipe and haulage equipment, without the necessary replacements and normal additions, has so deteriorated it that no small expense will be required to put it into efficient condition again. Part of this expense has already been met in the shipments of pipe and rails which you made in the year past, and it is probable in the coming year we will be obliged to submit further orders.

Haulage.

The electric haulage was called upon to handle a greater tonnage than ever before. The addition in the early part of the year of a seven-ton locomotive to the Lower 650 level haulage now permits quick handling of ore to the mill and also the handling of a material increase of waste from development. In the past ten years the Rosario electric haulage has handled about one million tons of material over a distance of about one and a half miles. The cars on this haulage are so badly worn as to be beyond repair. The plan is to replace them all in the coming year, and some of the material for this purpose has

already been ordered. Outside of the current extensions to track no other additions have been made to the Peña Blanca haulage. The Lower 650 electric haulage is equipped with one six-ton and two seven-ton locomotives, and the Peña Blanca haulage with one six-ton and two five-ton locomotives.

Rock Drills.

Tests have been made with various types of drilling equipment for tunnel driving. The most powerful hammer drills on the market have been tried, and while they will drill a larger and deeper footage in holes per shift, when compared with the less powerful hammer drills generally in use we find the advance made in driving tunnels to be very little more and in many cases there is no increase at all. The proposition resolves itself to the fact that a round of holes drilled in about a 6x7-foot tunnel will break only to a certain depth. Drilling equipment should, therefore, be sufficiently adequate to drill the necessary number of holes to the depth they will break and do this within the time fixed for daily blasting periods. A drilling equipment capable of boring a larger number of holes and beyond a possible breaking depth, and accomplishing this in less than the specified time, is too powerful, therefore wasteful of air, material and time. We have, therefore, come to the conclusion that with one or two exceptions it will be better to stick to the smaller, less expensive, moderately powerful equipment, instead of adopting the very powerful equipment now on the market.

THE MILL

Tonnage Crushed

	1919	1918
Total wet tons received	146,847	143,050
Average per cent moisture	8.1	9.1
Total dry tons milled	133,900	129,900
Average tons per day milled (365 days)	366.8	355.9
Average tons per day milled, full running time (344.6 days)		376.9
Average tons per day milled, full running time (339.1 days)	394.9	
Average tons per day milled, per 1850 lb. stamp, full running time	19.7	18.8
Number of 1850 lb. stamps	20	20

Recovery

	1919	1918
Total ounces silver received	1,849,807	1,829,883
Total ounces silver recovered	1,584,578	1,587,468
Average silver recovery, per cent	85.66	86.75
Total ounces gold received	10,851	10,394
Total ounces gold recovered	10,200	9,748
Average gold recovery, per cent	94.00	93.79
	(133,900 tons)	(129,900 tons)
Average ounces silver received, per ton	13.814	14.087
Average ounces silver recovered, per ton	11.834	12.221
Average ounces gold received, per ton	.081	.080
Average ounces gold recovered, per ton	.076	.075

Supplies Used Per Ton

	1919	1918
Sodium Cyanide, 128%	2.389 lbs.	2.397 lbs.
Aluminum dust	.237 "	.252 "
Soda ash	1.725 "	1.742 "
Lead Acetate	.011 "	.002 "
Lime %, 44.6 available	...	16.916 "
Lime %, 46.2 available	16.124 "	...
*Tube mill pebbles	18.273 "	2.779 "

* Local Pebbles.

Crushing and Grinding.

A new yearly tonnage record was established when 133,900 dry tons were put through the mill. This was accomplished in spite of the fact that owing to transportation delays the 35 x 10-foot Dorr thickener tank, which would have increased the settling radius materially, and thus permitted handling of a larger tonnage, was not installed. But it is now certain that this tank will be put into commission some time in February, and this, with some other minor improvements, we believe will enable us to mill even a larger tonnage during the coming year.

Several important economic changes were effected during the year which, though there was no decrease in the cost of chemicals or wages, resulted in dropping the total milling costs to $2.36 per ton, the lowest on record, as compared with $2.55 for the year previous. Perhaps the most important change was in the adoption of certain classes of rock and ore from the mine as grinding media for the tube mills in place of the now very expensive European flint pebble. Another saving effected is in

the manufacture of steel balls for the Hardinge Ball Mill. The raw material for this purpose costs nothing, as it is obtained from worn-out battery shoes and dies, of which there is a large stock on hand. Still another saving made is in getting from three to six weeks' longer wear out of battery dies by redressing them in a machine purchased and installed during the year.

Mine rock and ore, the consumption of which as grinding media is nearly tenfold when compared with the much harder European pebble, has not been in use long enough for us to be able to determine if the grinding capacity of the tube mills is decreased or not. However, we are prepared to add a tube mill formerly used in the San Juancito plant which we believe should not only take care of any decrease in the grinding capacity noted, but also permit finer grinding should this become necessary in the future.

The present mill has treated 845,758 tons since its installation in 1912.

Cyanide Treatment and Recovery.

The average time of treating a ton of ore in 1919 compared with the previous year is as follows:

	—1919—		—1918—	
	Hrs.	Min.	Hrs.	Min.
From batteries to high agitation tanks (weak solution)	5	00	5	00
In high agitation tanks (strong solution)	40	40	40	20
In high agitation tanks to filter press	13	55	13	16
Totals	59	35	58	36

In the recovery of silver and gold a slight improvement will be noted in the gold, but a drop of 1 per cent in the silver. This drop is due principally to more refractory ore than ever before and the difficulty of settling the slimes. So far as refractory ore is concerned, it is not possible to eliminate it entirely and at the same time maintain a full milling tonnage. The quantity treated, however, is being kept at a minimum, though the ore delivered to the mill, being made up from so many sources, in few of which its character is permanent, it is difficult to exercise control. This is particularly true of ore sources near the primary sulphide zone, where we are compelled to mine heavily at times.

The slimes settling difficulty should be considerably relieved during the coming year, due to the increased settling radius. It is also planned to give a longer period of air agitation to the pulp. This we expect to accomplish by converting the pulp storage tanks for the filter presses into agitators. We believe that the two changes just mentioned should have a beneficial effect upon the treatment and consequently result in a slightly better silver recovery than was the case last year.

It has not been possible to make any experiments with ozone in the agitating system, as stated in last year's report, due to the non-arrival of the ozone-producing apparatus. However, it is now on the way, and as its installation can be very easily made, the experiments should start at an early date.

It has also not been possible, owing to abnormal conditions, to experiment extensively with flotation on the residue or tailings. The few experiments already made do not give encouraging results, but they will be continued with a greater variety of oils with the hope that a combination will be found which will give the necessary recovery.

Precipitation.

The Aluminum Precipitation Process worked very successfully throughout the year, the consumption of aluminum dust per ton of ore, as shown on comparative statement, being even lower than in 1918.

The Crowe Vacuum Process has just been installed, and as this is the first plant in the world in which it has been applied to precipitation with aluminum dust, its operation will be watched with especial interest. Oxidation is even more detrimental to successful precipitation with aluminum than with zinc, and as by means of the Crowe process the oxygen is removed from the solution a very important saving in aluminum dust is looked for. Some time in the coming year it is planned to again resume zinc precipitation to determine what saving can be effected when the Crowe process is applied. The results of these tests, particularly in connection with recovery of value and saving in the cost of materials, will determine if we continue with aluminum or zinc.

Melting.

The average cost of melting aluminum precipitates about 840 fine into bars of Doré bullion, 980 silver, 6.31 gold fine was $9.18 per bar as compared with $11.05.

Slag resulting from the melting of precipitates in the two fuel oil furnaces was treated in the refinery addition and about three bars of Doré bullion obtained. The force in charge of the refinery also takes care of the refinery addition, therefore the cost of operating the latter is nothing. The slag residue was sent to the mill and cyanide plant for further treatment.

Supplies.

The consumption per ton of supplies was reduced to the lowest permissible point in 1918, consequently for 1919 we are able to show reductions only in the second decimal place. As the Crowe Vacuum Process will be in operation in 1920 we expect to show an important saving in aluminum and in zinc dust. The consumption of lime will go up when zinc is used, but, on the other hand, soda ash will not be necessary.

General.

It will be necessary to institute somewhat costly repairs and replacements to the wooden construction. The haulage trestle approach to the dumping floor over the ore bin will have to be replaced entirely, as well as the wooden beams under some of the cyanide tanks. The amount of such work in the coming year will be governed mostly by the lumber available, and the cost is apt to be high, due to the fact that reconstruction will have to be done without interruption to operations.

Power

The rainfall during 1919 was next to the lowest on record.

	Inches 1919	Inches 1918
Total rainfall	57.84	72.11
Number of days during which rain fell	184	188
Greatest rainfall in any one month	(Sept.) 13.58	14.89 (June)
Greatest single rain	1.98	2.82

When it is considered that the operation of the property depends upon water power entirely, it will be appreciated what

effect a dry year can have upon the business. We did everything possible to offset the unfavorable power conditions of 1919 by decreasing high peak loads, and it is due to this mostly that the operations did not suffer appreciably due to power shortage.

The Guadalupe Power Plant flume line, over 6,000 feet long, which is of wooden construction throughout, has now been in service eleven years. It is in such condition that today it will deliver less than 50 per cent of the water required by the plant at full load. It is impossible to make further repairs, so the entire flume will be rebuilt. It also will be of larger cross section than the present flume, so that there will be no lack of water even when it begins to deteriorate.

Both the San Juancito and the Guadalupe Hydro-Electric Power Plants rendered the usual dependable service, and together with the transmission lines are being kept in good condition. The water from the Jucuara Gulch, on the western slope of the mountain, diverted through the Clarke tunnel, so that it can be utilized in the two power plants, is an important help in the dry season and full advantage of it is being taken.

The distribution of the electrical power during the year was as follows: The tonnage basis for 1919 is 133,900 and for 1918 129,900.

	KILOWATT HOURS 1919	K. W. HRS. PER TON 1919	KILOWATT HOURS 1918	K. W. HRS. PER TON 1918
Mill	3,621,716	27.048	3,548,669	27.318
Mine	2,167,459	16.187	2,138,094	16.459
Electric haulage	267,527	1.997	310,755	2.392
Surface department	88,450	.661	62,150	.478
Surface department lights	37,075	.276	62,149	.478
Mill lights	31,382	.234	31,078	.239
Mine lights	18,829	.141	20,563	.158
Machine shop	25,105	.187	22,988	.177
Laboratory	18,827	.141	18,643	.144
Totals	6,276,370	46.872	6,215,089	47.843
Increase	61,281			
Cost per kilowatt hour	$.00376		$.00399	
Decrease	.00023			

Based on horsepower generated we show:

	1919	1918
Horsepower hours	8,413,365	8,333,434
Cost per horsepower hour	$.00280	$.00300
Cost per horsepower year	2.457	2.612
Decrease in cost of H. P. year in 1919	.155	

Surface Department

The work of this department is greatly diversified and scattered, therefore it is probable that less efficiency is obtained from the labor it employs than is the case of any other department. The Surface Department constructs and maintains in repair all roads, buildings, flumes, masonry work; it operates the carpenter shop and has charge of the stables and agricultural lands.

Roads

The road maintenance item was $7,385, as compared with $3,429 for the year previous, and most of this amount was expended on the Tegucigalpa road, about eighteen miles in length, which had suffered heavy damage from rains.

Lumber

Some of the wooden construction on the works is commencing to deteriorate after about nine years' installation. The same applies to the flume lines serving the power plants and the flume carrying the mill tailings. Work is already well under way to rebuild the Guadalupe flume, and the tailings flume will have to be rebuilt also at an early date. It is probable that the cost of repairs and replacements of this class will be quite heavy during the coming year.

Masonry Work

Large retaining walls, built of stone and lime mortar and cement, have been erected in several sections of the works. When it is considered that the works are located on a 38-degree slope, which in some places is even greater, the necessity for this construction can readily be seen. A considerable amount of this work still remains to be done and it is being carried out as circumstances permit.

Stables

It will be necessary, perhaps in the coming year, to purchase an appreciable number of mules, both for riding and cargo-carrying purposes, to replace the animals now in the stable and really unfit for work owing to old age.

Machine Shop

The machine shop, owing to the addition during the year of a new lathe, power hammer, large pipe-threading machine and power saw, is now very well equipped to take care of the increasing repairs to machinery of the mine and mill, and not only this, but to manufacture also many articles it was formerly necessary to buy at a higher cost.

An electric arc welding apparatus has been ordered. When in use it should pay for itself rapidly, as there is an important accumulation of broken machinery which this welder can make useful again. Also, the steel cyanide tanks are showing deterioration and it is expected that by means of this welder repairs will be made quickly and cheaply.

Hotel

There were 32,487 meals served during the year as against 36,390 the year previous. The cost in each case was 58 cents per meal.

Honduras Store and Commissariat

The Honduras store sales amounted to $19,643, yielding a net profit of $843, as compared with $23,428 and a net profit of $1,397 for 1918. The profit made really does not represent sufficient compensation for the trouble of running the store. The question has been considered whether it would not be advisable to discontinue the store altogether, but before this step is taken a change in the method of purchase and the sale of goods will be made to see whether more satisfactory results are not obtained.

The commissariat sales were $13,806. As the purpose of the commissariat is to supply the hotel and foreign families with necessary foodstuffs at cost, no profit was made.

Garrison

The average number of officers and men in the San Juancito and New Rosario garrison was 58, and the cost of maintenance $13,325. During the months of September and October there was no garrison composed of Government troops owing to these having left on account of the revolution. But

the same day the troops left a civil guard was organized, composed of volunteers from among the company's trusted employees. We are pleased to say that this guard kept exceptionally good order throughout the entire period of its incumbency.

Medical Department

There was a slight recurrence of influenza in the fall of the year, but happily in much milder form, less general and with very few fatalities, than was the case a year ago. As a result the Medical Department, instead of treating nearly ten thousand cases, as in 1918, records less than three thousand. The cost of maintaining the Medical Department was $5,053.

There has been a long-felt want of an adequate native hospital. The present one is an old wooden building formerly used as a living quarters and entirely unsuited to the purpose. We believe that a native ward, built along sanitary lines and of about eight beds, would be very desirable and recommend that this construction be undertaken at an early date.

Schools

The cost of maintaining the boys' and girls' schools was $4,832, as compared with $4,754 the year previous, showing an increase of $78. Each school is served by a principal and four teachers. The attendance has decreased about 15 per cent, due partly to the revolution. Frequent demands are being made upon the company to increase the teaching facilities at San Juancito, but owing to the fact that in the past such increases have benefited the children only in a very small degree the company has been very reluctant in granting them. The company's attitude has been explained to the proper authorities and it is possible that in the coming year some readjustment of the school question will be made which will be more satisfactory to all concerned.

Assay Office

Twenty-nine thousand eight hundred and nineteen assays at 33 cents an assay were made, as compared with 27,642 at a cost of 30 cents in the year previous. The increased cost per assay is partly due to the installation of a new two-muffle oil fuel assay furnace and somewhat higher cost of supplies.

Agencies

The company finds it necessary to have agencies on both coasts and in the Capital to assure the quick despatch of its freight and other business. The Banco Atlántida are the agents at Puerto Cortez, the Pacific Mail Steamship Company at Amapala and the San Lorenzo and Tegucigalpa agencies are each in charge of a company employee.

We draw your attention to the important reductions in cost of this branch of the business, as shown in the following comparative table:

	1919	1918
Amapala	$1,147	$2,036
San Lorenzo	2,370	2,238
Tegucigalpa	5,588	12,799
Puerto Cortez	900	1,605
Totals	$10,005	$18,678
Decrease for 1919	$8,673	

Supplies

In order to be reasonably assured of uninterrupted operation and be independent of frequent delays in transportation, particularly in Honduras during political stress, we should have an adequate stock of supplies, especially vital items. On the pre-world war basis about a two months' stock was carried, but owing to conditions obtaining today we consider that a four months' stock of vital supplies, such as cyanide, dynamite, etc., none too large. A bigger stock would permit better control of land freight rates, sudden large rate increases would not be necessary, and costly auto transportation as far as the Capital eliminated. The saving on these two items in the course of a year should pretty well cover the interest on the extra money involved in carrying larger quantities of supplies. The aim in the coming year will be to increase certain stocks to the new basis mentioned.

Expansion

Policy.

The policy of acquiring profitable mineral deposits in other parts of the Republic, either by denouncement or purchase, has been in force since 1914, and an examining engineer

has been in the field constantly. Numerous prospects have been examined and reports thereon submitted to you. Up to the present time only the San Marcos mine, constituting the holdings of the Sabana Grande-Honduras Mining Company, has shown promise. It is discussed in detail under another heading.

Some thought has been given to the Yuscarán mining region, but up to the end of the year the only work done has been largely that of endeavoring to determine the legal status of the several mines there. The Yuscarán region is said to have produced considerable ore in the past, but whether any of the mines ever proved a profitable venture has not as yet been determined. The principal underground workings of the region are caved, therefore an examination to estimate the present value of the properties would be difficult. We consider the Yuscarán region well worth investigation and recommend that this be made as soon as circumstances permit.

Aurora-Santa Elena

This property is under a two-year option which expires in June next. Its northern boundary is coincident with the southern boundary of the Rosario property. Development work in the Santa Elena vein proved disappointing and therefore was discontinued in the early part of the year. On the other hand, work on the Aurora zone has been continuous and it consists mainly of cross-cuts to intersect the Clephane and other veins, from some of which small pockets of rich ore were extracted in the past. Drifting is being done in the Clephane vein to reach the territory below the ore mentioned. Exploration of the Aurora group should be concluded within the next five months and what is disclosed will largely be a deciding factor as to whether or not it will be advisable for the company to exercise its option. The total expenditures for labor and supplies during 1919 were $13,075.

Sabana Grande

The erection of the thirty-ton flotation mill described in last year's report was concluded and treatment of ore commenced on March 20. The following is the production up to January 1, 1920:

Production

	Year 1919
Dry tons of ore milled	7,120
Total ounces of silver received	277,180
Total ounces of gold received	1,002
Total ounces of silver recovered	249,751
Total ounces of gold recovered	967
Average silver recovered (per cent)	90.01
Average gold recovered (per cent)	96.5
Concentration ratio	19.1
Tons flotation concentrate shipped	368.56

The value of the flotation concentrate shipped, taking silver at $1.00 and gold at $20.00 per ounce, was $265,729. There were estimated on hand on January 1st, 2,742 ounces silver and 31 ounces gold which belong to the 1919 production.

We have reason to believe that the percentage of recovery of both silver and gold shown is higher than actually is the case. Faulty ore scales and consistently low sampling, we believe, are the two principal causes for this. A new ore scale is about to be installed and the faulty sampling has been remedied, therefore future recovery figures should show greater accuracy.

THE MINE

Ore Reserves

Calculated and Estimated Ore.

Tons of ore at 13 cu. ft. per ton	10,130	
Average assay content per ton	52.23	ozs. silver
Average assay content per ton	.28	" gold
Per cent waste	33.9	
Total value	$585,804.00	
Value per ton, ore and waste	$ 39.05	

Estimated Broken Ore in Stopes.

Tons of ore and waste at 21 cu. ft. per ton	3,762
Value U. S. C. per ton ore and waste	$ 37.50

Ore on Dump.

Tons of ore	500
Value U. S. C. per ton	$ 40.00
Total value ore on dump	$ 20,000

Summary of Ore Reserves.

Total tons ore and waste	19,262
Total value	$746,879.00
Average value per ton	$ 38.77

The average value of the ore is as delivered to the mill and after it has undergone considerable assorting from the waste. However, due to the shortage of labor, it is not always possible to do this thoroughly; at times no assorting can be done at all; therefore it is probable that the average value of the ore treated will be lower than that of the reserves.

The ore occurrence of the San Marcos vein is extremely erratic both as to width and value. The vein also has a great tendency to split into stringers, which makes production of comparatively clean ore difficult. To overcome the chronic shortage of labor drilling by machine and the ore-fill method of stoping have been adopted, but owing to the nature of the vein just described it is quite possible that in the coming year we may have to adopt the more expensive hand-drilling and waste-fill method, yielding a considerably smaller tonnage per man, in order to produce a cleaner and therefore higher grade ore. It is possible that conditions may dictate a combination of the two methods, as due to the shortage of labor already noted it is doubtful if we could produce thirty tons per day by the waste-fill method of stoping alone.

Development

Development in the mine during the year amounted to 1,005 feet. It was nearly all in the San Marcos vein and is distributed as follows:

Drifting	Raising	Sinking	Cross-cuts	Total
390 feet	300 feet	90 feet	225 feet	1,005 feet

The main winze in Block 13 was sunk to a sufficient depth to cut the Lower 375-foot level. Drifting in each direction at this level disclosed a vein of average width, but in which the proportion of base sulphides has increased noticeably. No ore has been found in the small amount of drifting done up to date and from the general appearances the indications are that the depth limits of profitable ore in this section of the mine have been reached. Further development at this level may disclose pockets of ore, but we do not expect ore bodies having either the extent or the value of those found on the levels above.

Owing to the unsettled political conditions of the country, which had a further adverse effect upon the labor situation, it has not been possible to do the amount of development work required. There are ore possibilities southwest of the present workings and in the coming year the intention is to extend the Lower 130 S. W. heading, now in Block 4, into the territory mentioned. Sinking of the winze in the Amaya vein, Block 28, is a very important piece of work, as in the floor of the Upper 25-foot level a vein of good width and value exists. A station has already been cut in the foot-wall preparatory to actual sinking.

Sufficient work was done in the cross-cut at the Zero level for the Candelaria vein to show that this vein, which crops at the surface, does not extend to the Zero level. Two cross-cuts were run at the Lower 250-foot level off the San Marcos, one to the southeast and the other to the northwest, each of them over 100 feet in length, the object being to intersect any parallel veins or stringers to the San Marcos. This work met with no success. Some further prospecting at the surface on each side of the San Marcos vein is well warranted and it will depend on the results of this whether further driving of the cross-cuts just mentioned is warranted or not. Though not a small amount of drifting has been done in the Amaya vein, up to date it has disclosed no values over five ounces silver per ton, and these only in one or two spots. This vein is of great width, averaging well over five feet, and in places at the surface over 25 feet. We believe further development well warranted at the Upper 25-foot level. The present drift should be driven farther to the north and efforts also made to locate the vein south of the San Marcos.

The Mill

In the latter part of the year the capacity of the mill was increased from thirty to about forty tons per day, and this was accomplished by the addition of a pebble tube mill obtained from the obsolete material stock at San Juancito. This step became advisable when mining operations indicated that it would be more advantageous to treat a larger tonnage of lower grade ore instead of a smaller tonnage proportionately higher

in grade, but to produce which an excessive amount of assorting of waste from ore would have to be done.

Shortly after the mill was put in operation it was found that the tank capacity for settling the flotation concentrate was inadequate. A 16 x 10-foot Dorr thickener was consequently installed, which remedied the difficulty.

Power

The power item is a very expensive one at Sabana Grande, representing at times over 40 per cent of the total operating costs. Fuel oil is used, which though only worth about 6 cents per gallon in the United States, costs placed at Sabana Grande about 36 cents per gallon. This is due to the high cost of freight and containers. To reduce the power item we experimented with a grade of oil obtained from a supply tank at La Unión, Salvador, but as it was not entirely suited to the engines its use had to be discontinued. The manufacturers of the mill engine advise that by certain alterations the oil obtainable in Salvador can be used satisfactorily. The parts to effect such alterations have consequently been already ordered. Perhaps the best way to reduce the power bill would be to have the class of oil we are using now come down in bulk and discharge it to steel tank lighters especially constructed for the purpose. This procedure would eliminate the necessity of very expensive containers, and the large number of containers already on hand could be used to transport the oil from the port of San Lorenzo, where the lighters would be anchored, to the mine. We find the Fairbanks-Morse engine, which is running the mill, highly satisfactory. Its fuel consumption is economical and its service very dependable. Exactly the opposite is true of the engines driving the compressors, therefore it is well worth while to consider whether it would not be advisable in the very near future to eliminate the present engines driving the compressors and belt these compressors to a Fairbanks-Morse engine.

Visit of the President of the Company

The visit, last Spring, of the President, Mr. W. A. Prendergast, permitted the taking up of questions which it would have been impossible to treat satisfactorily by correspondence

alone. Important pending matters were disposed of and plans for the future thoroughly discussed. We feel that besides having the pleasant task of pointing out to visiting officers or members of the Board the many things of interest, we also get in closer touch with their ideas and wishes, and this can but serve the best interests of the company.

Government

In September the President, Dr. Francisco Bertrand, resigned in favor of a council of ministers and the presidency was constitutionally assumed by Dr. Francisco Bográn, the second designate and president of the National Congress. The national elections, which occurred in October, resulted in the choice of General López Gutiérrez. We are very pleased to be able to report that the company has enjoyed the good-will, coöperation and courtesy of the Government at all times.

Conclusions

In reviewing the work of the past year there is some cause for satisfaction. The financial returns from the silver and gold produced, thanks to the very high price of silver, are the largest in the history of the company. There were no interruptions to operations in spite of unsettled conditions of supply and transportation the world over, in the year past. The very extensive southern, southeastern and southwestern territory under continuous exploration for over eight years by the Esperanza Cross-cut and discussed under this heading in the last year's report, is responding favorably to the large amount of development, and already its ore resources are such as to permit the extraction of an important tonnage of ore above the average in grade. More favorable labor conditions have permitted an important increase in development in anticipation of the approaching exhaustion of profitable stope fill. Weather conditions were exceptionally favorable, the total rainfall, although considerably below the average, being so advantageously distributed as to cause no curtailment of operations due to power shortage in the rainy season. Due to this reason also damage to the roads and flumes has been the smallest in

years. A new record for the mill, both as to the amount of tonnage treated and the low cost per ton, has been established. The San Marcos mine, of Sabana Grande, which was put on a productive basis in the early part of the year, is now in a fair way towards paying back its indebtedness to the company.

In the coming year we expect to mill at an even greater rate than in the year past. The ore reserves and the degree to which they have been exposed will very readily permit this. Every effort will be made to keep development footage up to the amount of labor available for it, but at the same time the fact shall not be lost sight of that ore is the object. As in the past, operating costs will be kept down to the lowest figure without the practice of false economy. The condition of the property is such as to lead us to believe that bullion production during the coming year should be about equal to that of the year past and operating costs not any greater.

We wish to take this opportunity of thanking the staff for their hearty coöperation as well as that received from you and your office. Without this it would not have been possible to accomplish the work of the year past.

Respectfully submitted,

A. R. GORDON,
General Manager.

Annex "A"

Broken Ore in Stopes
December 31, 1919
Totals by Veins

VEINS	Tons
Rosario	5,668
San Joaquin	3,208
San Miguel (North)	1,118
Crisanta	384
Porvenir	311
Capitana	869
Candelaria	1,660
Guadalupe	348
Culebra	2,016
Buena Ventura	1,914
North West	40
GRAND TOTAL	17,536

Summary of Calculated Ore Reserves
(At 13 cu. ft. per ton)

VEINS	Average Width Ft.	Tons of Ore	Per Cent Waste	Tons of Ore & Waste	Total Value U.S.C.	Value at Mill U.S.C.
San Miguel (South)	1.62	44,476	40	74,127	$1,038,413	$14.01
San Miguel (North)	1.65	4,978	50	9,956	147,955	14.86
San Joaquin	1.07	6,573	65	16,432	205,277	10.93
Culebra	1.46	8,694	60	21,735	234,419	10.79
Socorro	.83	2,279	70	7,596	112,788	14.85
Buena Ventura	1.04	4,863	50	9,726	134,576	13.84
Carmen	1.39	7,232	40	12,053	220,096	18.26
Catalina	.60	801	70	2,670	52,279	19.58
North	.50	1,013	51	2,066	33,572	16.25
South West	2.10	6,038	30	8,625	187,248	21.71
TOTALS		86,947		164,986	$2,366,623	$14.34 Average

Summary of Estimated Ore Reserves
(At 13 cu. ft. per ton)

Candelaria	5,000	$ 65,000	$13.00
Colonia	3,000	45,000	15.00
Capitana	1,000	13,000	13.00
Esperanza	1,000	13,000	13.00
Guadalupe	1,000	12,000	12.00
Nuevo	1,400	18,200	13.00
North West	3,000	45,000	15.00
Rosario	15,000	210,000	14.00
Crisanta	1,000	14,000	14.00
West	3,000	45,000	15.00
Jucuara	4,000	52,000	13.00
Stringers	3,000	42,000	14.00
TOTALS	41,400	$574,200	$13.87 Average

Summary of Estimated Fills
(At 17 cu. ft. per ton)

West	16,000	$176,000	$11.00
Guadalupe	22,000	242,000	11.00
Buena Ventura	2,000	22,000	11.00
North West	2,000	22,000	11.00
Nuevo	1,000	11,000	11.00
Candelaria	7,500	82,500	11.00
Rosario	9,000	99,000	11.00
TOTALS	59,500	$654,500	$11.00 Average

Summary

Calculated Ore	164,986	$2,366,623	$14.34
Estimated Ore	41,400	574,200	13.87
Estimated Fills	59,500	654,500	11.00
Broken Ore in Stopes (at 21 cu. ft. per ton)	17,536	217,096	12.38
TOTALS	283,422	$3,812,419	$13.45 Average

Estimated content per ton—Ag. 12.25 ozs.
Au. .06 "

Note—These Reserves are based on Silver at $1.00 per oz. and Gold at $20.00 per oz.

Annex "B"

VEINS	1919 Reserve (Including Broken Ore in Stopes)	1919 Production (Including Broken Ore in Stopes)	Tons Left for 1920 (Exclusive of New Reserves)	Tons Produced in Excess of Total 1919 Reserve
San Miguel (South)	74,822	25,911	48,911	....
San Miguel (North)	12,277	6,650	5,627	....
San Joaquín	25,272	9,846	15,426	....
Culebra	4,727	8,567	....	3,840
South West	8,625	....	8,625	....
North	2,066	....	2,066	....
Catalina	2,670	....	2,670	....
Buena Ventura	7,231	15,776	....	8,545
Candelaria	11,943	10,804	1,139	....
Colonia	4,060	2,235	1,825	....
Esperanza	1,000	....	1,000	....
Guadalupe	2,480	2,541	....	61
Nuevo	1,400	....	1,400	....
North West	5,000	1,347	3,653	....
Rosario	20,549	17,197	3,352	....
Crisanta	2,650	1,193	1,457	....
West	4,000	1,324	2,676	....
Jucuara	4,000	....	4,000	....
Capitana	1,530	1,719	....	189
Socorro	6,257	3,493	2,764	....
Stringers (Concepción Porvenir)	3,000	1,100	1,900	....
TOTALS	205,559	109,703	108,491	12,635

Stope Fills

Candelaria	9,000	1,457	7,543	....
Guadalupe	26,000	3,827	22,173	....
Buena Ventura	3,000	5,405	....	2,405
North West	3,000	5,947	....	2,947
Nuevo	2,000	1,369	631	....
Rosario	10,000	14	9,986	....
West	24,000	11,699	12,301	....
TOTALS	77,000	29,718	52,634	5,352

Development

Ore from Various Veins.	....	12,117	....	....
GRAND TOTALS..	282,559	151,538	161,125	17,987

Annex "C"

Development for Year 1919

VEINS	Drifts	Raises	Cross-Cuts	Totals
San Miguel (North)...	516.5	11.0	181.0	708.5 feet
San Miguel (South)...	3,515.0	1,364.0	483.5	5,362.5 "
Candelaria	336.5	62.5	117.0	516.0 "
Colonia	50.0	190.0	129.0	369.0 "
Crisanta	124.0	....	13.0	137.0 "
Culebra	1,503.5	316.5	26.0	1,846.0 "
Socorro	489.5	....	11.5	501.0 "
San Vicente	14.0	....	....	14.0 "
Buena Ventura	800.0	374.5	262.0	1,436.5 "
Rosario	442.0	23.0	....	465.0 "
West	....	71.0	....	71.0 "
North West	619.0	128.0	....	747.0 "
San Joaquín	....	....	....	....
Guadalupe	26.0	77.0	....	103.0 "
Esperanza Cross-Cut ...	....	....	517.5	517.5 "
Capitana	40.0	....	....	40.0 "
Carmen	1,551.0	404.5	....	1,955.5 "
Concepción	112.5	....	....	112.5 "
Porvenir	393.5	123.5	....	517.0 "
North	93.0	....	45.0	138.0 "
Fortuna	100.0	....	65.5	165.5 "
Prospects	178.0	....	....	178.0 "
TOTALS	10,904.0	3,145.5	1,851.0	15,900.5 feet

Annex "D"

Vein Production—1919

Dry Tons

VEINS	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
San Miguel (North).....	287	274	336	324	268	337	348	495	1,236	746	688	193	5,532
San Miguel (South).....	1,526	1,930	2,074	2,079	2,018	2,051	2,779	2,304	2,272	1,954	2,745	2,179	25,911
Candelaria	589	431	536	565	382	855	1,441	888	769	916	1,010	762	9,144
Colonia	288	340	255	273	193	70	67	100	24	4	145	476	2,235
Crisanta	135	76	271	235	92	...	...	...	...	...	...	...	809
Culebra	214	216	245	141	156	253	743	709	786	874	1,036	1,178	6,551
Socorro	226	495	600	871	867	364	70	...	...	...	...	...	3,493
Buena Ventura	1,028	996	1,004	1,022	1,122	1,358	1,746	1,247	1,004	822	821	1,692	13,862
Rosario	1,190	1,030	1,040	1,196	902	882	1,136	632	1,005	672	981	863	11,529
West	198	166	286	150	118	44	...	...	...	85	137	140	1,324
North West	56	86	28	109	78	62	55	47	85	268	315	118	1,307
San Joaquín	312	403	158	397	373	273	268	574	519	923	1,005	1,433	6,638
Guadalupe	123	193	207	120	156	578	236	53	136	123	108	160	2,193
Concepción	132	58	...	80	68	67	72	44	45	10	...	...	576
Capitana	41	170	...	...	...	...	74	136	134	96	70	129	850
Porvenir	...	...	25	63	71	23	31	...	...	...	...	...	213
Ore from development.....	1,131	1,080	1,359	480	855	790	1,195	1,249	1,083	1,040	810	1,045	12,117
TOTALS	7,476	7,944	8,424	8,105	7,719	8,007	10,261	8,478	9,098	8,533	9,871	10,368	104,284

Annex "E"

Fill Production—1919

VEINS	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Guadalupe	566	261	438	23	142	279	280	296	492	902	95	53	3,827
West	1,676	1,074	1,184	742	1,048	763	787	1,136	769	921	699	900	11,699
North West	961	867	542	309	400	305	186	489	457	570	405	456	5,947
Buena Ventura	564	631	491	352	664	646	377	441	384	288	257	310	5,405
Nuevo	393	263	189	136	13	...	18	60	32	51	86	128	1,369
Rosario	...	...	...	...	14	...	...	...	...	...	...	...	14
Candelaria	164	60	32	33	...	...	159	230	261	281	176	61	1,457
TOTALS	4,324	3,156	2,876	1,595	2,281	1,993	1,807	2,652	2,395	3,013	1,718	1,908	29,718

Summary

Total vein production	104,284 dry tons
Total fill production	29,718 " "
GRAND TOTAL PRODUCTION	134,002 " "

N. B.—Production for first half of year was calculated on basis of dry tons crushed and for second half of year on basis of dry tons delivered to mill. The above summary therefore shows a grand total having 92 tons more than was actually delivered to the mill.

New York & Honduras Rosario Mining Company
Income and Profit & Loss Statement for the Year Ended December 31, 1919

Production of Gold and Silver	$2,115,158.25	
Less—Freight and Expense on Bullion	62,065.30	
Operating Income		$2,053,092.95
Operating Expense		1,132,805.61
Operating Profit		$920,287.34
New York Administrative Expense		76,368.28
Net Income from Operating		$843,919.06
Other Income		147,996.53
Total Income		$991,915.59
Deductions from Income		58,828.99
Net Profit for Period		$933,086.60
Appropriated for Reserves—		
Depreciation	$64,315.44	
Taxes	106,610.63	
Fire Insurance	4,020.70	
		$174,946.77
Profit and Loss Balance—Carried to Surplus		$758,139.83
Add Surplus Balance—January 1, 1919		2,434,065.59
TOTAL		$3,192,205.42
Deduct—Reserve for Depletion of Mines in 1919	$334,750.00	
Dividends paid in year 1919	200,000.00	
		534,750.00
Surplus Balance—December 31, 1919		$2,657,455.42

New York & Honduras Rosario Mining Company
Balance Sheet—December 31, 1919

ASSETS

Mines, Real Estate and Concessions	$3,000,000.00	
Buildings, Plant and Equipment	1,175,933.70	
Investments: Stock of other Companies	44,853.00	
Advances—to other Companies	157,582.76	
Insurance Fund	19,134.96	
		$4,397,504.42
Cash and Cash Items	$153,030.38	
Liberty Bonds	208,800.00	
Bullion in Transit	805,137.05	
Broken Ore in Stopes and in Mill Bin	95,133.83	
Materials and Supplies	329,101.16	
Accounts Receivable	115,238.83	
		1,706,441.25
Deferred Charges to Operating	$48,065.55	
Accrued Interest Receivable	2,637.68	
		50,703.23
TOTAL ASSETS		$6,154,648.90

LIABILITIES

Capital Stock—				
200,000 Shares Par Value $10.00				$2,000,000.00
Notes, Drafts and Accounts Payable				401,970.34
Accrued Interest Payable and Deferred Credits				10,092.10
Reserves—				
For Depreciation			$487,104.77	
For Exchange Fluctuations			129,993.25	
For Taxes			110,000.00	
For Insurance Fund			19,134.96	
For Depletion		$1,079,012.62		
Less Advances for expansion	$240,114.56			
Distributed to Stockholders to date.	500,000.00	740,114.56	338,898.06	1,085,131.04
Surplus—Including increase in valuation of mines to comply with Government regulations amounting to $420,987.38 after deduction of reserve for depletion set aside to date				2,657,455.42
TOTAL LIABILITIES				$6,154,648.90

Auditor's Certificate

We have audited the books of accounts of New York & Honduras Rosario Mining Company, kept at the New York Office, and with the exception of Honduras Inventories of Material and Supplies which have been verified only as to extension and footings, we *HEREBY CERTIFY* that the above Balance Sheet is in our opinion a correct statement of the financial status of this company at December 31, 1919.

BANKERS & MERCHANTS ACCOUNTING COMPANY,

By ARTHUR P. MONK,
Certified Public Accountant (N. Y.)

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
Total	$28,319,185.78

Dividends Paid

1887	No. 1	$37,500— 2½%
1888	Nos. 2 to 5	60,000— 4 %
1889	Nos. 6 to 14	150,000—10 %
1891	Nos. 15 to 16	30,000— 2 %
1892	Nos. 17 to 21	165,000—11 %
1893	Nos. 22 to 25	150,000—10 %
1894	No. 26	37,500— 2½%
1896	Nos. 27 to 28	30,000— 2 %
1897	Nos. 29 to 40	180,000—12 %
1898	Nos. 41 to 48	120,000— 8 %
1899	Nos. 49 to 60	180,000—12 %
1900	Nos. 61 to 75	225,000—15 %
1901	Nos. 76 to 93	300,000—20 %
1902	Nos. 94 to 100	105,000— 7 %
1903	No. 101	15,000— 1 %
1904	Nos. 102 to 108	105,000— 7 %
1905	Nos. 109 to 121	180,000—12 %
1906	Nos. 122 to 139	285,000—19 %
1907	Nos. 140 to 153	210,000—14 %
1908	Nos. 154 to 165	180,000—12 %
1909	Nos. 166 to 173	120,000— 8 %
1910	Nos. 174 to 180	105,000— 7 %
1911	Nos. 181 to 182	90,000— 6 %
1912	No. 183	30,000— 1½%
1913	Nos. 184 to 188	220,000—11 %
1914	Nos. 189 to 193	240,000—12 %
1915	Nos. 194 to 197	240,000—12 %
1916	Nos. 198 to 205	400,000—20 %
1917	Nos. 206 to 211	300,000—15 %
1918	Nos. 212 to 215	200,000—10 %
1919	Nos. 216 to 219	200,000—10 %
Total		$4,890,000

Amortization Distribution	1919 Nos. 6 to 9	200,000—10 %
Dividends 1 to 182 inclusive, on Capital Stock		$1,500,000.00
Dividends 183 to 219 inclusive, on Capital Stock		2,000,000.00
Amortization Distribution, No. 1 to 9 inc., on Capital Stock		2,000,000.00

New York & Honduras Rosario Mining Company
Comparative Statement of Working Capital

December 31	1913	1914	1915	1916	1917	1918	1919
Cash and Cash Items	$106,866	$90,618	$112,208	$259,459	$515,562	$684,899	$380,965
Bullion in Transit	207,438	252,348	271,735	353,115	325,260	387,348	805,137
Ore in Stopes and Mill Bin	89,077	96,884	99,951	122,873	121,171	112,125	95,133
Inventories and Supplies	250,940	272,805	292,731	300,759	427,908	438,427	377,166
Accounts Receivable	41,805	5,020	1,896	66,497	115,303	62,683	117,876
Total Quick Assets*	$696,126	$717,675	$778,521	$1,102,703	$1,505,204	$1,685,482	$1,776,277
Current Liabilities†	91,344	71,138	59,026	257,498	567,783	694,373	522,062
Net Working Capital	$604,782	$646,537	$719,495	$845,205	$937,421	$991,109	$1,254,215
Increase over Preceding Year		41,755	72,958	125,710	92,216	53,688	263,106
Increase over Dec. 1913, Working Capital		41,755	114,713	240,423	332,639	386,327	649,433
Increase in Investments over 1913		38,309	43,781	103,521	134,794	321,015	442,550
Additions to Plant, etc., since 1913							260,758
Increase of Assets since 1913‡							$1,352,741

*Embraces all Cash in Banks and Agencies, Accounts and Notes Receivable, Inventories, but does not include Plants, Real Estate, Mining Property, Equipment nor Investments.

† The Liabilities embrace everything except Capital Stock, Surplus and Reserves.

‡ Excludes increase valuation of mine.

REPORT *of the*

NEW YORK & HONDURAS ROSARIO MINING CO.

1920

NEW YORK

January 1, 1921

OFFICERS 1921-1922

LEWIS L. CLARKE, *President.*
H. A. GUESS, *Vice-President.*
A. R. GORDON, *Vice-President.*
W. C. LANGLEY, *Treasurer.*
J. PERLMAN, *Secretary.*

BOARD OF DIRECTORS 1921-1922

WM. A. PRENDERGAST, *Chairman.*

SIDNEY ABBEY,	J. C. F. JACOBY,
LEWIS L. CLARKE,	W. C. LANGLEY,
H. A. GUESS,	W. L. SAUNDERS,
ALFRED V. GUIDET,	M. F. SOTO,
IRVING HEIDELL,	AMBROSE G. TODD,

P. R. WEILER

EXECUTIVE COMMITTEE 1921-1922

WM. A. PRENDERGAST, *Chairman.*

SIDNEY ABBEY,	AMBROSE G. TODD,
H. A. GUESS,	P. R. WEILER,

W. L. SAUNDERS,

LEWIS L. CLARKE
W. C. LANGLEY } *Ex-Officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company

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New York, January 1, 1921.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

In our last annual report attention was called to the material increase in the market price of silver, which had developed in the year 1919. *This satisfactory condition continued through the year* 1920, *up to the month of May. Subsequent to this, however, there took place a continuous recession. The limits of height and fall in the market price of silver during that year are impressive, being* $1.36\frac{3}{4}$ *on January* 13*th, and* $.59\frac{1}{4}$ *on December* 10*th. It is superfluous to comment on the effect that this decided change in the realizable value of the Company's product has had on its general business, as this must be self-evident.*

The average price realized for the Company's product during the year was $.8215. *The net cost of silver recovered, after taking due credit for the gold produced, was* $.6346. *Consequently, every ounce of silver produced during the past year cost the Company* $.6346. *It must, therefore, be borne in mind that the cost of producing the Company's principal product was, at certain periods during the year* 1920, *more than the realizable value of that product. This condition of affairs carries its own conclusion.*

The decline in silver prices was not accompanied by a corresponding recession in the cost of supplies. In nearly all the principal supplies which enter into the conduct of the Company's

business the price levels continued as high as during the early part of the year, or during 1918–1919. *There has been some reduction in these prices, but not of a sufficient degree to produce any appreciable effect on the cost of operation.*

The realizable value of the Company's product for the year 1920 *was* $1,568,612.32, *compared with* $2,115,158.25 *for the year* 1919, *a decrease of* $546,545.93.

The total cost of Mining and Milling Operations was $1,125,-196.19, *compared with* $1,197,121.05 *for the preceding year, or a decrease of* $71,924.86.

The tonnage milled in the year 1920 *was* 140,100, *compared with* 133,900 *for the year* 1919, *or an increase of* 6,200 *tons.*

The per ton operating expense was $8.51 *for the year* 1920, *compared with* $9.50 *for the year* 1919, *or a decrease of* $.99 *per ton.*

The New York Office Expenses for the year 1920 *were* $67,498.26, *as compared with* $76,368.28 *for the preceding year, or a decrease of* $8,870.02.

While the foregoing figures show that the cost of operations was held to reasonable limits, the important point is that the net operating income fell from $5.83 *for the year* 1919 *to* $2.28 *for the year* 1920, *or a reduction of* $3.55 *per ton, this being due to the decided reaction in the price of silver.*

You were informed in the last annual report that the Company's concession from the Government of Honduras expired December 31, 1920. *A petition for the renewal of this concession was presented to the Executive and Congress of Honduras at the legislative session commencing January* 1, 1920. *The President called a special session of Congress for the purpose of acting upon the Company's application, and a renewal of the concession was granted, to run for a period of twenty years from December* 31, 1920. *As a consideration for this concession, the Act of Congress required that the Company should install an entire new transmission equipment for the water supply system of the capital of Honduras, Tegucigalpa, and the adjoining city, Comayaguela, the supplies for this equipment to be furnished by the Company at its expense and the work to be done under its direction and at*

its expense. The Act provided that a contract for the work to be performed should be entered into between the Government and the Company and this contract was signed in September, 1920. *The Company is required to perform its part of this contract within two years of the signing of the contract.*

Your attention is especially drawn to the contents of the General Manager's report regarding the discovery of the "Salvador Vein," which may have a marked effect upon the Company's future.

The General Manager's report is the most complete that has ever been made to the Company. A study of it will provide the stockholders with a thorough knowledge of the Company's operations and the nature of its properties.

The operations of the San Marcos Mine at Sabana Grande, Honduras, have not been of as satisfactory a character during the past year as during the first nine months of the operation of that property. This has been due in part to labor troubles and deficiencies in machinery equipment. To these general defects, I regret to report, there was added during the month of December a destructive fire which destroyed the mill. This property was fully covered by insurance. The reconstruction of the mill was immediately commenced and the necessary machinery ordered and shipped from this country. The predictions made a year ago in regard to the results of the Company's investment in the Sabana Grande-Honduras Mining Company, of which it owns nearly 63% *of the capital stock, were, naturally, based on the high price of silver existing a year ago. The fall in the price of silver and the defects already referred to compel us to reverse these calculations.*

In conformity with its expansion policy, the Company has had several properties under serious consideration during the past year, but as the results of the examinations of these properties were not satisfactory, and due to the general condition of business it was decided not to acquire them.

The Vice-President and General Manager, Mr. A. R. Gordon, visited the United States for the first time since 1917.

On behalf of the Company, I visited Honduras twice during the past year, especially in connection with matters affecting the renewal of the concession.

Dividends of $320,000.00 *and amortization distributions of* $80,000.00 *were paid during the year* 1920, *representing in gross the same percentage of return to stockholders as during the years* 1916, 1917, 1918 and 1919.

The Company's books have been audited by Messrs. Ernst & Ernst.

Respectfully submitted,

WM. A. PRENDERGAST,
President.

Annual Report of the General Manager

January 1, 1921.

To the President,

17 Battery Place, New York, N. Y.

Dear Sir:

We present for your consideration and approval the following, which is a report of operations on the Company's properties in Honduras during the fiscal year ending December 31, 1920.

PRODUCTION

	1920	1919
Dry tons treated	140,100	133,900
Ounces silver produced	1,711,349	1,584,379
Ounces gold produced	8,001	10,200
Ratio of silver to gold	214	155
Bars Dore Bullion	1,097	1,014
Bullion fineness	968.44 Ag. 4.53 Au.	979.94 Ag. 6.31 Au.

The entire product was consigned to the office in New York.

Making comparison with the year previous, an increase in the quantity of ore treated by 6,200 tons, and in silver production of 126,770 ounces will be noted. On the other hand, there is a marked decrease in the gold production, represented by 2,199 ounces. This is because the average gold content per ton of ore treated was .060 ounces, as against .081 ounces for the year previous. This drop is accounted for by the fact that all the veins discovered since 1913 carry comparatively but little gold. Unless high gold bearing veins are found in the future to compensate the exhaustion of ones now being mined, no increase in gold production should be expected. Considering gold as a by-product, and consequently crediting silver production with it, the production of gold, at all times an important item, becomes particularly so, when under a falling silver market, as at present, the price of silver per ounce approaches uncomfortably close to the cost of its production.

OPERATING COSTS

From statements shown in other parts of this report it will be noted that there was a very material reduction in operating costs per ton as compared with the year 1919.

The precious metal content of the ore being more or less fixed, the profit derived from its exploitation depends mainly upon three things: (*a*) price of silver, (*b*) rate of exchange, (*c*) cost of supplies. In former years as again today, when silver hovered around 55 cents to 60 cents per ounce, we commanded a rate of exchange on gold drafts for Honduran currency equal to seldom less than 2.40 silver pesos for one dollar U. S. currency. Today, as for three years past, the rate is two pesos for one dollar, and this rate is fixed by law. It means that though there has been no increase in wages to labor, the labor, nevertheless, costs at least 20% more. Considering that this item alone is about 1,100,000 pesos per year, to say nothing of an additional yearly expenditure for such items as land freight and local supplies, which will amount up to around 200,000 pesos more, it will be realized what a very great factor the rate of exchange is in the cost of operation. Taking 1,300,000 pesos as an average yearly expenditure for labor, freight, and local supplies, these items cost almost $110,000 U. S. currency more today than has been the case at any time for quite a number of years previous to 1917. In 1917, the exchange rate was 2.19; in 1916, 2.59; in 1915, 2.94; in 1914, 244; in 1913, 2.35; and in 1912, 2.51.

It will be our aim to operate at an even lower figure in the coming year than in the year past. To help attain this, there is the possibility of a decrease in the cost of supplies, even though the exchange rate may remain against us. Should it not be possible to decrease costs to a figure commensurate with the price of silver, measures may have to be taken to effect a general readjustment of operations.

THE MINE

Ore Reserves

The total reserves existing on January 1, 1921, and shown in detail on Annex "A", are given in the following summary.

In the calculations a mining width of 3.5 ft. and of 4 ft. is assumed.

Summary

	Tons of Ore and Waste	Oz. Ag. Per Ton	Oz. Au. Per Ton	Total Oz. Ag.	Total Oz. Au.
Calculated ore, at 13 cu. ft. per ton	123,418	19.26	.07	2,377,647	8,827
Estimated ore, at 13 cu. ft. per ton	36,500	12.52	.07	456,900	2,530
Estimated fills, at 17 cu. ft. per ton	27,500	10.00	.05	275,000	1,375
Broken ore in stopes, 21 cu. ft. per ton	24,365	14.20	.06	345,983	1,462
Totals	211,783	16.32	.067	3,455,530	14,194

Average metal content per ton at mill:
Silver, 16.32 oz.
Gold, .067 oz.

In presenting the ore reserves this year we do so in the face of a declining silver market and, therefore, without actually knowing what value per ounce to take as a basis. Material which a year ago was mined at a profit cannot be touched today. It is, therefore, not included in the ore reserve figures submitted. Nevertheless, we are able to show a very substantial reserve, which, from the standpoint of total ounces of silver and almost that of gold, is even greater than that reported a year ago, notwithstanding the fact that during 1920 there were mined 1,988,371 ounces of silver and 8,465 ounces of gold. This increase is due principally to the reserve in the Salvador vein, which, however, is as yet not fully prepared for heavy stoping. The South San Miguel and the Culebra will sustain stoping at an equally heavy rate as in the year past, as the ore is exceptionally well exposed.

Since it became economically possible to mine stope fill 211,240 tons of it have been obtained. The present reserve is still sufficiently accessible to permit mining at the same rate as in the year past, should this be warranted.

We have endeavored to show as much of the calculated reserves in the different veins as is possible on the maps, and these are submitted with this report for your inspection.

DEVELOPMENT

On Annex "C" we show in detail the amount of development footage made in each vein. The following table is a summary, comparison also being made with the year previous.

Footage Made

Year	Drifts	Raises	Cross-cuts	Winzes	Total
1919.....	10,904.0	3,145.5	1,851.0	None	15,900.5 ft.
1920.....	10,459.5	4,884.5	1,431.5	62.5	16,838.0 ft.
Increase in 1920,		1,739.0			937.5 ft.

The high price of silver prevailing during the greater part of the year permitted more vigorous development of the lower grade ore sections of several veins. This has had its result in greater footage having been driven than ever before. Nearly 25% of the total development, or 4,087.5 ft., was in the Esperanza section of the mine where the Porvenir, Carmen, Fortuna, and a new strike last May, the Salvador, are located. That the results of this development have been most satisfactory will be seen by comparing the reserves in these veins with those of the year previous.

The South San Miguel was again the vein to undergo the largest amount of development, this being 5,249.5 ft., or 31% of the total. Next was the Culebra with 3,525.5 ft., or 21% of the total. It is likely that in the coming year there will be a decided decrease of development in these two veins, as the lateral limits of the former and vertical limits of the latter have apparently been reached. It is quite certain, however, that owing to the very important discoveries in the Esperanza section, development in it will be very materially increased.

Ore Production

The following comparison is a summary of Annexes "D" and "E", which show ore and fill production during the year from each vein:

	1920	1919
Ore broken from veins.....	91,690 tons	92,167 tons
Ore from development of veins.....	19,078 tons	12,117 tons
Stope fill material.....	29,319 tons	29,718 tons
Total produced and milled.....	140,087 tons	134,002 tons
Percentage fill produced.....	20.9	22.2
Number of producing veins.....	17	16

South San Miguel was the premier ore producer for the third time, its output being 24,229 tons, against 25,911 during

1919. The same can be said regarding the West vein with respect to fill output, this being 12,767 tons against 11,699 tons in 1919.

There was a notable increase in ore from development, that is, ore obtained from the excavation of development drifts and raises in the veins. The reasons assigned for this are three-fold, (1) the larger development footage, (2) the opening up of new ore discoveries, like the Salvador, (3) the high price of silver which permitted considering as ore a good deal of material, which, under lower silver market conditions, would have been waste.

We have compiled a statement embraced in Annex "B" showing the total ore and fill production from each vein, from October 1, 1907, to January 1, 1921. It gives a good idea how the veins do with respect to tonnage and should prove of interest. Unfortunately, no records of this nature were kept previous to October 1, 1907.

Veins Worked During the Year 1920

The maps, in longitudinal section and in plan, submitted with this report to amplify the remarks on the different veins, we believe to be more complete than has been the case for several years. They are our working maps, and consequently give a monthly progress picture.

The first figure represents width in feet and tenths, the second ounces silver, and the third ounces gold per ton. The sample interval in levels and raises is 5 feet, and in stopes 5 and 10 feet. The assay results are of pure vein matter only, consequently much higher than those obtained of the material after it has been mined.

VEINS

South San Miguel Vein

Development, which consisted of 5,249 feet, was devoted principally to the section above the U-550 level. Three new levels, the Zero, U-600 and U-900, were driven and the U-700 extended southward a considerable distance. A number of connecting raises were also driven. Ore, already included in

the reserves of 1919, was opened for stoping by this development, and also an additional quantity found. The southern extremity of the vein was reached on the U-250, U-350, U-450 and U-550 levels. At the U-900, development shows that while the vein is of the average width, it carries comparatively less value. Owing to the proximity of the surface this was to be expected. The Zero level which, with the exception of the L-100, is on the deepest part of the vein, indicates that the impoverished zone usual at depth has been reached. Due to this, while no ore can be expected below this level, an important quantity exists between it and the next level above, the U-150. From what has just been said it is evident that the lateral and vertical limits of this vein have been pretty well determined. Accordingly, the amount of development in the coming year will be but moderate.

The drop in the price of silver has necessitated the exclusion of unprofitable vein matter, and this is reflected in a decreased ore reserve. However, even on this basis, we believe it will be possible to mine at nearly the same rate in the coming year as in the year past, as the ore is very well exposed.

On Annexes "C" and "D" are shown in detail the ore production and the development footage. The South San Miguel was, for the third time, the largest ore producer, and in which the largest amount of development was done.

In the course of development, a branch vein, called the South San Miguel stringer, was encountered. Upon its development, a small quantity of ore was found. The vein is narrower than the South San Miguel, and more spotty as to value, but, on the other hand, less broken up. Of the three levels driven on this vein, the U-450, U-550 and the U-700, the U-450 intersected the Culebra vein. It will pay to drive beyond the Culebra and perhaps also a level below the U-450.

Buena Ventura Vein

The total production from this vein was less than half when compared with the year 1919. This is due to it becoming increasingly difficult to encounter ore bodies of any size in

this old vein, and, therefore, permit extensive stoping. Nearly all of the ore came from the U-450, U-550 and U-600 levels, between blocks 47 and 50.

Development was materially reduced, owing mostly to lack of available ground. However, some ore was opened up at the L-300 level, and during the coming year it will be prepared for stoping.

North San Miguel and Concepcion

The production of 3,402 tons in the past year came from a block of ground developed in the year previous at the U-900 ft. level, and from a stringer between the U-150 and U-250 levels near the West vein junction.

Besides the ore in reserve, there is a possibility of more being found in the ground above the U-550 level, between the Capitana and West vein junctions. Exploratory work to determine the depth limits of the ore deposit, which, since discovery of the vein, has yielded over 180,000 tons, indicates that no ore in any quantity can be expected below the L-100 and L-200 levels. There are pillars between ore shoots, some of which it will pay to investigate, and as opportunity offers, such development should be done. Outside of this and the development above the U-550 level, there is no other ground available for development.

Rosario Vein

The production of 14,810 tons is practically equivalent to the total reserve reported last year. It came from 16 stopes, distributed over six different levels, some of the stopes being three-quarters of a mile apart. This vein, the first to be worked by the Company, still has quite a number of ore pillars left, and it is in these that nearly all of the ore reported in this year's reserve exists. The fact that it took so many stopes, spread over such great distance, to produce last year's tonnage shows the principal ore bodies have been removed, and we are now mining ore which has either been overlooked or was of too low grade to be treated in previous years. In order to stope over such extensive territory, a very large portion of the work-

ings must be kept open, and, therefore, sometimes it is a question whether it would not be cheaper to leave the ore and let some of the levels cave.

The 1,458.5 ft. of development was as diversified as the stoping.

Northwest Vein

The ore body opened up by the 1919 development at the Zero level in blocks 48 to 50 and stoped in the year past, more than came up to expectations. Probably it was the most uniform and highest grade ore body mined, and it produced most of the tonnage credited to this vein last year. Efforts are being made to find its extension above the U-150 and below the Zero levels; also to the southeast. At the U-500 a small amount of stoping and development was done, but with very moderate results.

The fill output of 4,814 tons came mostly from the Zero and U-350 levels, and a good deal of it was of exceptionally good grade. This indicates that either the ore stoped many years ago must have been exceedingly rich, or else very careless mining was done. Probably the former is true.

Guadalupe Vein

Upon conclusion of the L-550 level stopes in the first part of the year the ore output virtually stopped, the total for the year being but 614 tons as compared with 2,193 tons for 1919. A raise was started from the L-650 level to get beneath the L-550 ore body, but it was stopped as the vein exposed did not look promising and, moreover, the ore of the L-550 level was rather low in grade.

The 1,000 tons of ore in the reserve we expect to obtain mostly from pillars exposed after the fill, of which 4,000 tons are estimated, is removed.

Candelaria Vein

Though worked continuously for 15 years, this vein produced 9,372 tons of ore as compared with 9,144 tons in 1919. The fill output of 3,089 tons is the largest in any year, and

double that of 1919. The ore reserve of 4,000 tons is of low grade, but it is expected this will be somewhat made up by cheaper mining. The fill reserve is prepared for removal and we believe can be mined at a fair profit.

As the Candelaria carries a larger proportion of gold to the silver than most of the other veins, and in view of the drop in the price of silver, efforts will be made to push development in some sections.

West Vein

The 12,767 tons of fill mined in the past year represents the largest output since 1918 when 14,632 tons were obtained. The 524 tons of ore came from pillars exposed after the fill was removed. The fill reserve reported exists above the U-350 level and is all opened up for mining. The ore reserve of 2,000 tons we estimate will be found in pillars which will be exposed as the fill is mined.

Of the 417.5 ft. of development done, 366.5 were in the L-550 level heading west. As mentioned in previous reports, the object of the L-650 work is to get into Block 72 in the Southwest vein where good ore is known to exist in the floor of the Zero level, but which, though reported in the southwest reserves, cannot be mined until the ground is drained of water.

San Joaquin Vein

The greater amount of the 4,789 tons mined last year came from the L-650 level stopes. The ore was of poorer grade than that obtained in previous years. This vein lends itself to easy mining and being so conveniently located with respect to the L-650 electric haulage we always endeavor to have a good reserve of broken ore in stopes on hand to keep the mill running, should an accident to the main ore chutes temporarily cut them off from the rest of the mine. For this reason the broken ore in stopes reserve of 5,743 tons is disproportionately large.

No development was done in the year past and none is contemplated in the coming year.

Colonia Vein

Drifting at the L-450 level has failed to disclose the good ore believed to exist in the floor of the L-300 level. It is now quite evident that it will be necessary to raise above the L-450 to encounter this ore, and such work will probably be done in the coming year. This ore body, after being exposed through the L-450 level, will be as handy with respect to the L-650 electric haulage as is the case at the present time with the San Joaquin ore. Therefore, plans should be made to have this ore ready against the time when the San Joaquin stopes are exhausted.

The ore output in the past year was 4,156 tons and it all came from pillars in the old workings above the U-400 level. There are quite a number of pillars still remaining which will be removed as circumstances and the price of silver permit.

Socorro Vein

There was no production from this vein in the past year. On the U-700 level 66 feet were driven on what we think may be the southern extension of this vein, but nothing of importance was disclosed.

This vein is about worked out and while there are some large pillars of good grade ore still in place, the cost of mining, due to hardness of the rock and inaccessibility, is so great that it will not pay to do any stoping at the present price of silver, low rate of exchange and high cost of supplies. For this reason no ore reserves are shown this year.

North and Catalina Veins

What has been said about the Socorro is also applicable to the North and Catalina veins. Though no work has been done in these veins for years, reserves have always been shown. The reserves are excluded this year but will appear again as soon as conditions are such as to make stoping economically possible.

Nueva Vein

On the Zero level 138.5 ft. of drifting was done to the west, connection being made with the Guadalupe vein. A moderate amount of ore was found and stoped. The production of fill was quite important because, though amounting to only 2,430 tons, it was of exceptionally good grade. It came from the stopes of the L-200 level.

There are fair chances for opening up ore by driving the L-400 level to the east; also by some further work at the L-220 level to the west.

Capitana Vein

The 2,082 tons mined in the year past came mostly from above the U-550 level. The development, which consisted in sinking a winze 12 ft. at the L-100 and 17.5 ft. of drifting, disclosed ore which, though quite rich, is very narrow.

The ore reserves are reported, but there are sections which it will be possible to work at a profit when economic conditions are more favorable.

Crisanta Vein

The ore from this vein has never been of high grade. In view of this, no development or stoping was done in the past year, and none is contemplated in the near future. On the other hand, should there at any time be work going on in the Socorro vein at the U-600 or U-700 levels, it would then pay to do a little more prospecting in the Crisanta winze, existing in the floor of of the U-700 level, as it is only a short distance from the Socorro workings.

Culebra Vein

The 3,525.5 ft. of development consisted in driving southward on every level, from the Zero to the U-900 inclusive, and in raising between these extensions. The ore found has more than come up to all our expectations, both as to width and value. Putting it more clearly, we show an ore reserve total of 33,008 tons, against 23,751 tons a year ago; and this, in

spite of the fact that 8,702 tons were mined and a lower price of silver taken as a basis.

Development in the coming year will be more limited, because the U-700 level lacks but a short distance to the surface and the ore body on the U-900 does not appear to be as continuous as on the lower levels. The vein is sufficiently prepared to permit stoping at a heavier rate than in the past year.

The best possibilities for more development lie southward and ahead of the U-150, U-250, U-350 and U-500 levels.

Southwest Vein

No development or stoping of ore existing in the floor of the Zero level can be done until the L-650 west heading, now being driven, drains the Zero level. Very recently a large quantity of water was tapped by the L-650 heading, and it is possible that this may be coming from the southwest vein.

Jucuara Vein

No work was done in this vein for the past two years, due to the winze in which the 2,000 ton reserve is located, being under water. The vein is also in a very isolated section of the mine, so it is not likely that any work will be done in the coming year either. There are some stringers in the vicinity which will warrant investigation, and when this is undertaken would be a good opportunity to also revive work in the Jucuara.

The Esperanza Cross-Cut Section

Porvenir Vein

Work in this vein was continuous on a moderate scale, 579 tons of ore being produced and 223.5 ft. of development driven. The ore is, on the whole, low in grade, but it is easily mined and treated, therefore a 2,000 ton ore reserve is estimated in spite of the low silver market.

The ore differs quite considerably from that of the other veins in that it carries an exceptionally large amount of manganese oxide. Manganese is often a good indication of gold,

therefore development is well warranted of the territory above the U-250 level.

El Carmen Vein

The development work generally outlined in last year's report was carried out and has met with good success. The vertical extent of the vein above the U-150 level has been proved to the U-450, or a distance of 300 ft. The U-150 level was extended a considerable distance to the southeast, but revealed no ore of importance. The U-250 was driven to the southeast and northwest. Good ore was found, most of it by the southeast heading. Two new levels were created, the U-350 and U-450. The small amount of drifting in each has mostly been in good ore.

The ore occurrence of the Carmen is what is termed "bunchy." The vein is quite variable in width and value, but in spots exceedingly rich. Owing to loose walls and the tendency of the vein to split into two or more stringers, it is quite difficult to mine comparatively clean ore, but it is expected that as the vein appears to be less shattered at the upper levels, this difficulty will be minimized when stoping is done there.

Production in the past year amounted to 2,746 tons, and development to 1,834.5 feet. The ore reserve of 14,523 tons is next the highest in value per ton reported this year, and is as yet not sufficiently prepared for intensive stoping.

The best field for future development lies to the southeast and above the U-450, and the development now in progress is on this basis.

Fortuna Vein

The 410 feet of development, half of which consisted in driving raises, holds out the hope that perhaps a more constant ore occurrence will be encountered above the U-150 level. Owing to there being so many opportunities for profitable development in the Esperanza section, the best prospects are given the preference; hence the Fortuna has not received the attention it merits. Its possibilities have not been forgotten,

however. They lie above the U-150 level and can best be determined by driving a cross-cut from the Carmen at either the U-350 or U-450 levels, as the two veins are less than 100 feet apart. This work will probably be done in the coming year.

The ore production amounted to 527 tons and there are in reserve 2,619 tons, of which 619 consists of broken ore in stopes.

Salvador Vein

Last May the Esperanza cross-cut intersected a vein 300 feet distant from the Fortuna which has been named the Salvador. Subsequent development, which, up to the end of the year, amounts to 1,453 feet, has shown that this vein bids fair to be one of the most important strikes ever made. Its width, which is quite uniform, is greater than the average and the valuable content higher than is usual over such a good width. At the U-150 level, where 900 feet of the vein are exposed, 700 feet are in ore. All the raises, also the U-250 level drift, show the vein to be of about equal value as at the U-150 though there is a tendency, on the whole, for it to become narrower above the U-150. Perhaps the best way to give an adequate idea of what has been found in the short space of eight months is to refer to the ore reserves. These show the existence of 33,240 tons, averaging 26.5 oz. silver and .06 oz. gold per ton, and are the largest as well as the highest in value of any vein in the mine today.

Neither the lateral nor the vertical limits of the ore body have as yet been reached, so the immediate development which suggests itself is the determination of these limits. In the coming year we shall accordingly commence sinking a shaft below the U-150 level, drive a cross-cut from the U-450 Carmen level to intersect the vein at this elevation and drift in each direction on at least two levels.

The reserves are as yet not sufficiently exposed to permit stoping at a heavy rate, though in December it became necessary to commence this on a moderate scale in order to help counteract the rapid decline in the price of silver.

If at all possible, stoping should be deferred so that development can proceed at a more rapid pace until at least the extent of the ore body is determined.

The Esperanza Cross-Cut

What has been said concerning the Salvador, Carmen and the other veins intersected by this cross-cut amply indicates the very great importance of this development project. With respect to the surface, the Salvador, Fortuna and Carmen are situated under one of the highest portions of the mountain range, and laterally there is at least a mile of territory on each side of the cross-cut. The same will hold true of any vein or veins intersected within the next 1,500 feet. We will not venture to predict that another Salvador or Carmen will be intersected, but so long as the same geological conditions persist in the cross-cut as obtain in the territory in which these veins exist, driving of the cross-cut should by all means continue and as rapidly as possible. On the surface and quite some distance ahead of the cross-cut heading, rock float of what probably is "alaskite," has been picked up. As gold ores are sometimes associated with it, it is possible that any veins which may be intersected in the future will carry a greater gold content than the present ones.

The cross-cut has reached the point where it will be necessary to change its direction. Very probably it will be turned to the left or southeast and to such extent as to make it more or less at right angles to the Salvador vein.

Future Development

That 4,187.5 feet, or nearly 25%, of the total development footage in the past year was confined to the Esperanza section, and that today 24.4% of the total reserve tonnage and 36.26% of its value exist there is very indicative of the source from which most of the ore milled in the future will come. The conditions are such that in the coming year there is opportunity for more than double the development footage made last year, were it possible to execute it. The chances of finding more ore in the veins of this section, we believe to be excellent, therefore their development will be given first consideration. A very

important work which must not be delayed any longer is that of sinking, to sufficient depth, an adequate winze for the purpose of not only developing the Carmen, Fortuna and Salvador veins below the U-150 level, but also to make available for stoping the important quantity of ore already in reserve there.

In the vicinity of the Jucuara vein there exist two or more stringers. On one of these some work was done, but the result was disappointing. We believe more work is warranted and in the coming year expect to proceed with it. It is possible that any ore found may carry more gold than is usual in most of the other veins.

After the Esperanza section, the Culebra vein presents the best possibilities for immediate ore in quantity, and next in order of importance is the South San Miguel.

Sources for profitable development diminish with a falling price of silver as do the ore reserves; consequently a general readjustment of the development program is necessary. This means that ground holding out the possibility of yielding material which only dollar silver can make profitable will not be developed.

MINE EQUIPMENT

Haulage

With record development footage and record tonnage sent to the mill, the haulage equipment handled a greater amount of material than ever before. Due to the very high price of steel products, no orders were placed for car parts, and only a very small order for rails in spite of the fact that about 12,000 feet of new track were laid during the year. It was possible to get along by shifting about this equipment, and this procedure will continue until prices drop to a reasonable level again. The hand haulage is in bad shape, as many of our cars are nearly worn out, and the 16-lb. rails in places almost worn to a knife edge. Also, track both on the hand and electric haulage needs re-leveling and ballasting. Good track and cars mean minimum tramming costs; so as many of these repairs will be made in the coming year as circumstances permit.

Air Compressors

The two air compressors, each 2,120 cubic feet of free air per minute capacity, rendered efficient and continuous service throughout the year. The electric driving motors which, since increase in the capacity of each compressor from 1,725 to 2,120 cubic feet, have been operating considerably above their rating, show no signs of deterioration. We therefore believe that satisfactory service from this plant can be expected for quite some time.

Rock Drills

During the coming year we expect to experiment with a smaller stoping drill than the one now in use. We think that by boring a small diameter hole, and consequently using correspondingly less dynamite, cheaper stoping costs will result in the softer veins.

In drifting work we are sticking to the medium size drilling equipment and find that with but few exceptions as good results are obtained as with the larger equipment with which tests were made in 1919.

THE MILL

Tonnage Crushed

	1920	1919
Total wet tons received	153,667	146,847
Average per cent moisture	8.8	8.8
Total dry tons milled	140,100	133,900
Average tons per day milled (365 days)	383.8	366.9
Average tons per day milled, full running time (339.2 days)	413.	
Average tons per day milled, full running time (339.1 days)		394.9
Average tons per day milled, per 1850 lb. stamp, full running time	20.6	19.7
Number of 1850 lb. stamps	20	20

Recovery

Average ounces silver received, per ton	14.193	13.815
Total ounces silver received	1,988,372	1,849,807
Average ounces silver recovered, per ton	12.215	11.834
Total ounces silver recovered	1,711,349	1,584,579
Average silver recovery, per cent	86.07	85.66
Average ounces gold received, per ton	.0604	.0810
Total ounces gold received	8,465	10,851
Average ounces gold recovered, per ton	.0571	.076
Total ounces gold recovered	8,001	10,200
Average gold recovery, per cent	94.52	94.00

Supplies Used Per Ton

Sodium cyanide, 96–98%	3.166 lbs.	
Sodium cyanide, 128%		2.389 lbs.
Aluminum dust (59,426 tons)	.147 lbs.	.237 lbs.
Zinc dust (80,674 tons)	.686 lbs.	
Soda ash (59,426 tons)	1.730 lbs.	1.725 lbs.
Lime per cent 46.2 available		16.124 lbs.
Lime per cent 45.4 available	22.985 lbs.	
Tube mill pebbles (local)	40.272 lbs.	15.490 lbs.
Tube mill pebbles (foreign)	.471 lbs.	2.783 lbs.

Total Milling Costs

	Total Costs		Cost per Ton	
	1920	1919	1920	1919
Labor	$ 62,031.20	$ 68,179.72	$ .44	$ .51
Supplies	250.746.12	233,855.11	1.79	1.75
Power	13,577.36	13,823.42	.10	.10
Total U. S. Currency	$326,354.68	$315,858.25	$2.33	$2.36

Crushing and Grinding

The erection of an additional thickener tank had the anticipated effect in that by eliminating most of the slime settling difficulties, it permitted the milling of a larger tonnage. In the past year by crushing 140,100 dry tons the best previous record was exceeded by 6,200 tons, and this, in spite of the fact that the mill was shut down for about two weeks due to damage to power plants caused by the flood of last June. In the month of August the mill crushed 13,700 dry tons.

Cyanide Treatment and Recovery

The average period of treatment given the ore, as compared with the year previous, is as follows:

	1920		1919	
	Hrs.	Min.	Hrs.	Min.
From batteries to high agitation tanks (weak solution)	5	00	5	00
In high agitation tanks (strong solution)	42	46	40	40
From high agitation tanks to filter press	13	02	13	55
Totals	60	48	59	35

The ore milled in the past year was no more amenable to treatment than that of the year previous. But due to elimination of many of the sliming difficulties by the installation of an additional Dorr thickener, and in the latter part of the year changing from aluminum precipitation to that of zinc, also by

increasing the period of treatment by over an hour, the silver extraction not only has not dropped as has been the case for the past three years but increased by .41% when compared with the year 1919. Similarly, the gold extraction increased by .52%. The question of extraction of valuable metal from the ore is having our attention constantly, and any method having possibilities of better work is given careful consideration.

It was not possible to make extensive experiments of adding ozone into the agitating system. The ozone producing machine arrived in a damaged condition and it cannot be put into efficient use until the necessary parts, which have been ordered, arrive.

All tests so far made with the idea of reducing the valuable content in the ore residue by means of flotation are discouraging. Some silver and gold is recovered, but they are not sufficiently concentrated to make the installation of the flotation process economically possible.

Precipitation

In the beginning of the year the Crowe Vacuum Process was put in operation and gave very successful results in connection with aluminum precipitation. The average aluminum consumption per ton of ore during 1919, without the Crowe Vacuum Process, was .237 pounds, and the average for five months during which this process was used was .147 pounds, showing a saving of .09 of a pound. Last July we changed over from aluminum to zinc precipitation to determine whether the Crowe Vacuum Process would be as successful with zinc. The average zinc consumption per ton of ore without the Crowe process was .884 pounds, and with it .681 pounds, indicating a saving of .203 pounds. Due to the variation in the price of aluminum and of zinc dust, it is impossible to say at this time just what the net saving is. Based on the 1920 experiments only, precipitation costs are reduced about 8 cents per ton when aluminum is used. But there is the disadvantage that milling capacity is decreased, due to greater sliming, and also the possibility that silver extraction is slightly less than when zinc is used. As this question rests at the present time, aluminum dust is preferable when, to obtain a satisfactory monthly

production, the treatment of a maximum tonnage is not required; but if it is required, then zinc dust should be used. As a general statement, it can be said that the character of the ore being equal in each case the capacity of the mill is decreased 1,000 tons per month when aluminum dust is used.

Melting

It cost $8.57 per bar to melt 1,097 bars of Dore Bullion, averaging 968.44 silver and 4.53 gold fine. In 1919 it cost $9.18, or 61 cents more, per bar.

Particular care is taken to treat to the lowest possible point the slag resulting from melting. About once every two months this slag is crushed and concentrated in the refinery annex. After all the valuable metal that is obtainable by this method is removed the residual slag is then sent through the mill for treatment with the ore.

Economies Effected

The economies effected in 1919, such as the local manufacture of steel balls for the ball mill and rock pebbles for the tube mills, have been continued throughout the past year. The use of an electric arc welder not only has obviated the necessity of purchasing some expensive parts of machinery but permitted making a great variety of minor repairs in many instances at a trifle of their former cost. All these items entered into making the milling cost $2.33 per ton, as compared with $2.36 for the year previous, the lowest on record, though there was a slight increase in the cost of supplies, as in the item of lime, and no decrease in wages paid to labor.

General

Since the present mill was put into commission, onJuly 1, 1912, it has crushed up to January 1, 1921, 985,858 dry tons, or at the rate of 318 tons per day, without making allowances whatsoever for shut-downs on account of repairs or other causes. Though originally a 200-ton plant, its present capacity is between 400 and 425 dry tons per day; and this more than 100% increase has been effected by a very moderate outlay—less than $50,000. In last year's report we stated that repairs and replacements were necessary. Some of these have been

made, but the amount has not quite kept pace with deterioration. Therefore, sometime in the near future—perhaps in the coming year—a general overhauling should take place, even if it is necessary to curtail or even suspend milling operations over a short period. Low costs are only possible with a fairly efficient plant, so the work mentioned should not be let go too long.

Storm

In the early part of June an unusually heavy storm occurred and in less than eight hours 5.57 inches of rain fell. It had been raining quite steadily for some days previous, so all that was necessary was this extra heavy fall to cause many land slides along the precipitous mountainsides and gulches. Boulders, many tons in weight, and tree trunks of all dimensions came down the river which passes through San Juancito. Due to its shallow banks the river soon overflowed and changed its course right in the center of the town. Adobe dwellings melted away and in many instances were replaced either by a new river bed or mounds of debris. So far as is known eight lives were lost.

The Company sustained damage, principally to its two hydro-electric power plants, which, up to January 1, 1921, it has cost $35,640 to repair. Damage to the San Juancito plant consisted of the complete destruction of its three dams, 2,800 feet of the Escobales and 320 feet of the Aguacatal flumes, eleven sections of the high pressure pipe just above the plant and the carrying away of the retaining wall at the river's edge, right in front of the plant, which it was built to protect. The Guadalupe plant was damaged to the extent that its large dam at San Juancito was washed away and the gulch made nearly twice as wide at that point. The flume bridge and 450 feet of new flume disappeared also.

Due to the washing away of the retaining walls on each side of the river where the principal bridge for traffic is located, this bridge disappeared and the large warehouse and other buildings on each side were in considerable danger for a time. The former site of the mill, cyanide plant, laboratory and shops is now covered with many tons of boulders and tree

trunks and the building once used for a hotel is gone, as well as some small dwellings located in the plantel.

At the mine, the Pena Blanca level dump was washed away, and this time a section of the retaining wall built to protect the shops was destroyed. One electric locomotive, of which no trace has been found, as well as other material, such as pipe, timber and rails, disappeared also. Some of the pipe and rails have been salvaged.

The Tegucigalpa road and that to the lime kilns were damaged to a considerable extent and inaccessible for over a week.

At New Rosario, though the entire installation is built on an angle of about 40 degrees, no damage was done, and this is due to the fact that there is virtually no watershed above. It certainly is fortunate the New Rosario was chosen for the present mill, shops and other buildings, because had these been built on the old site at San Juancito, as was once seriously contemplated, nearly a total loss would have been sustained, which the insurance would not have covered.

Of the four storms which have happened in the history of the Company the one described was undoubtedly the most severe.

Temporary repairs were made and operations resumed after two week's suspension. In rebuilding the retaining walls at such vital places as the San Juancito power plant particular care is taken to make them as strong as possible. Also to act as greater protection for this plant, a channel is to be constructed which, after the water rises to a certain height, will divert it away from the plant.

All repair work is not as yet completed, but it is expected that it will be in the coming year.

Power

The rainfall during 1920 was an average one, but due to its not having been very advantageously distributed, not much more power was obtainable than in the year previous when the rain-fall was 13.34 inches less, or the lowest on record. The following table shows a comparison between the two years.

	1920	1919
Total rain-fall	71.18 inches	57.84 inches
Number of days during which rain fell	179	184
Greatest rain-fall in any one month	16.19 (June)	13.58 (Sept.)
Greatest single rain-fall	5.57	1.98

The San Juancito hydro-electric plant supplied more power than ever before and at times operated at an overload. This was due to the constant decrease in power output of the Guadalupe plant, caused by the lack of water to the turbines, in turn due to the very deteriorated condition of the wooden flume. During the past year replacing of this flume by one of greater capacity commenced, and up to date about 40% of the work has been completed. The lumber used has been dried and treated with creosote, therefore the new flume should last longer than the old.

More electrical power was used in the past year than ever before and it was also cheapest on record. The power was distributed as shown in the following table; 140,100 tons being taken as a basis for 1920 and 133,900 for 1919.

	Kilowatt Hours 1920	K. W. Hrs. Per Ton 1920	Kilowatt Hours 1919	K. W. Hrs. Per Ton 1919
Mine Power	2,006,007	14.318	2,167,459	16.187
Electric Haulage	257,282	1.836	267,527	1.997
Mine Lights	16,257	.116	18,829	.141
Mill Power	3,911,482	27.919	3,621,716	27.048
Mill Lights	32,157	.230	31,382	.234
Surface Lights	32,159	.230	37,075	.276
Air Mill Power	128,640	.918	88,450	.661
Machine Shop	28,768	.205	25,105	.187
Laboratory	19,298	.139	18,827	.141
Totals	6,432,050	45.911	6,276,370	46.872
Increase	155,680			
Cost per Kilowatt Hr.	$.00343		$.00376	
Decrease	.00033			

Based on horsepower generated, we show:

	1920	1919
Horsepower hours	8,622,051	8,413,365
Cost per horsepower hour	$.00255	$.00280
Cost per horsepower year	2.233	2.457
Decrease of horsepower year in 1920	.224	

Power Cost Per Ton

Mine Department	$.0554	$.0680
Mill Department	.0969	.1032
All Other Departments	.0051	.0050
Total Power Cost per Ton	$.1574	$.1762

Machine Shop

The only addition to the machine shop equipment during the past year was an electric welding apparatus. It has proved highly successful and has paid for itself at least twice. The machine shop is being operated on a factory basis instead of the "cost per ton" basis. This creates the tendency toward making cheaper repairs of all machinery, and what is very important, the manufacture of some supplies in competition with the general warehouse.

Assay Office

During the year 28,334 assays were made at the cost of 32 cents per assay, compared with 28,819 in the previous year at a cost of 33 cents per assay.

Honduras Store and Commissariat

	1920	1919
Gross Sales	$14,276.91	$19,642.94
Net Profit	343.32	807.63

In last year's report we stated that the advisability of discontinuing the Honduras store would be taken into consideration. We find that as a money making proposition it has been a failure, because the net profits really do not represent sufficient compensation for the trouble and the risk of spoilage. As no means of increasing profits present themselves, and in view of the competition of San Juancito merchants who are much more favorably located, the possibilities are the store will be discontinued sometime in the coming year. So that the principal employees can obtain such necessary articles as soap, tobacco, etc., these will be kept in the Commissariat.

The Commissariat sales in the past year amounted to $13,424, as compared with $13,806 in the year previous.

Medical Department

In the year past there was a very marked decrease in cases of complaints of the respiratory organs; also, no epidemic of any sort occurred. The cost of maintaining the medical department was $6,900, against $5,053 for the year previous,

showing an increase of $1,847. It is due principally to increase in the use of medical supplies, all of which are still quite costly.

Hotel

There were 27,722 meals served at the cost of 64 cents per meal, as against 32,487 meals at 58 cents per meal for the previous year. Owing to there having been fewer persons served there were fewer meals over which to divide the overhead charges, and this accounts in part for the increased cost per meal. Another cause is the fact that certain food articles were even more expensive than during 1919.

Lumber

As wooden construction all over the works is commencing to show signs of age, the call for lumber is likely to increase in the future. By the construction of a road on the Jucuara zone, which will make available an important tract of pine timber, we expect to get lumber cheaper than has been the case in the last two or three years, and, therefore, help to offset the cost of the greater quantity used.

Masonry Work

Probably more masonry work was done last year than has been the case since the construction of the plant. This is due to the rebuilding of all the dams and some retaining walls, which, as has been described under another heading, were destroyed by the flood. On account of this work it was impossible to build retaining walls in several places where they are still needed. Erection of a retaining wall may, in some cases, seem like an unnecessary expense, but such construction is soon paid for, as landslides are prevented, which, every time there is a considerable storm, are costly to remove.

Roads

During 1920 it cost $5,157 to maintain the roads, as compared with $7,385 in 1919, which represents a saving of $2,228. Most of the work was done on the Tegucigalpa road, 18 1-2 miles in length.

In the coming year we will probably build two to three miles of roads to make accessible new timber lands. Therefore, it is probable the road item will be heavier.

Stables

In last year's report we mentioned that it might be necessary to purchase mules, both for cargo and riding purposes, as many that the Company owned were really too old to be fit for service. Due to an epidemic in the latter part of the year ten animals were lost, among which were some of the best. However, no purchases have been made as the prices asked at the present time are exhorbitant.

Garrison

The cost of maintaining the garrison was $15,351, as compared with $13,325, showing an increase of $2,026.

The Company, under its concession, is obliged to maintain a garrison for the protection of its property, and the policing of the town of San Juancito which is on the Company's zone. In the above item are included special watchmen appointed by the Company, necessary in the past year, owing to the country having passed through a revolution. The average number of men comprising the garrison was 63, as compared to 58 for the year previous.

Schools

In 1919 it cost $4,832 to maintain the schools, while in 1921 this item was $6,732, showing an increase of $1,900, due to an increase in the salaries, and in the teaching personnel in both the boys' and girls' schools. The Company, under its contract with the municipality of Tegucigalpa, is obliged to maintain the schools.

Supplies

Though in the early part of the year, owing to uncertainties of supply and of shipment, it was necessary to carry large inventories of supplies, conditions have improved quite appreciably with the result that we should soon be able to reduce to pre-war stocks. Unfortunately, there has been no marked

decrease in the cost of the principal articles used in operation. But it is hoped that since general deflation has set in, this will soon be reflected in mining supplies also.

Agencies

The Company finds it necessary to maintain agencies at Amapala, San Lorenzo, Tegucigalpa and Puerto Cortes, to conduct satisfactorily its freight and other business. In the year 1919 a decrease amounting to $8,673 was made in the cost of operating these agencies, and the total cost for that year was $10,005. In the year just closed the total cost was $8,486, showing a further decrease of $1,519. It is possible that in the coming year we will be able to show even a lower total cost.

Expansion

Aurora-Santa Elena

Work was stopped on the Santa Elena group of veins in 1919, but on the Aurora group it continued until the early part of 1920. The Aurora development proved disappointing, excepting it indicated that whatever possibilities for ore there might be, they would be apt to lie in the territory to the south which belongs to the Rosario Company. In view of this, the two-year option which expired in June, was not exercised.

Yuscaran

Options on the principal mines of the Yuscaran district were obtained and an examination made, which was as detailed as the greatly caved condition of the workings permitted. Supplemented by nearly 4,000 samples taken, the examination shows conclusively that ore in workable quantities said still to exist in the underground workings we examined is not there; that the output from the district in the past 50 years is greatly exaggerated; that none of the mines were ever worked at a profit in that time, and that there are uncertainties as to the ownership of some of the mines. In view of all this, it was recommended that the Company should not exercise any of the options.

Other Examinations

An engineer was kept in the field throughout the year, looking over prospects to which attention has been drawn. Up to the present time nothing worthy of interest has been found.

Sabana Grande

Operations at the San Marcos mine, representing the holdings of the Sabana Grande-Honduras Mining Company, are briefly reported and discussed under the following headings:

Fire

We are sorry to report that on December 15th both the mill and assay offices were destroyed by fire. Fortunately, both these buildings, together with all the machinery and supplies contained therein, were covered by insurance. Re-construction was at once started with but few alterations from the original plans.

Production

	1920	1919
Dry tons ore milled	11,671.00	7,120.00
Total ounces silver received	317,586.00	277,180.00
Total ounces gold received	1,325.00	1,002.00
Total ounces silver recovered	268,337.00	249,751.00
Total ounces gold recovered	1,109.00	967.00
Average silver recovered (per cent.)	84.49	90.01
Average gold recovered (per cent.)	83.64	96.5
Concentration ratio	21.39	19.1
Tons flotation concentrate shipped	554.07	368.56

Compared with the year 1919 the percentage of recovery of silver and of gold is lower. But in the 1919 report it was stated that we did not consider the recoveries shown for that year as correct, believing them too high. For this reason the 1920 figures are lower. Some ore which was partially oxidized was treated, and as the flotation process is not suited to it, the average recovery for the year is lower, perhaps, by 2% than should actually be the case when milling ore from the deeper levels.

THE MINE

Ore Reserves

Some necessary assay records were destroyed in the fire which makes it impossible to submit underground ore reserve

figures at this time with any degree of accuracy. This information, however, will be submitted later.

At the surface there is a stock of ore all ready for the mill which is estimated at 1,484 tons, having an average assay of 37.44 oz. silver and .21 oz. gold, or a total of 55,561 oz. silver and 322 oz. gold. It is probable that the gold figure is too high.

Stoping

When the mine started to operate on a productive basis, the ore fill method of stoping was adopted in the larger ore bodies. It worked quite successfully until the vein in some of the stopes split into one or more stringers, which resulted in an excessive amount of waste being broken with the ore, and accordingly the production of a lower milling grade. The waste fill method of stoping was immediately adopted wherever possible, and while more expensive, cleaner ore was produced, and, therefore, of a better grade.

Development

Development was continuous throughout the year, and was all done in the San Marcos vein. The footage made was 1,414.5 feet, against 1,005 feet in the year previous.

The winze in block 13 was not sunk below the 375 ft. level during the year. Drifting was done to the northeast and to the southwest at the 375 ft. level, small bunches of ore being disclosed. As was anticipated, the vein contains markedly less silver at this depth than is the case at the higher levels, but, on the other hand, there is an increase in gold.

The proposed winze in the Amaya vein at the Upper 25 level to expose an important body of ore, was not sunk, because the L-130 San Marcos heading is now sufficiently close to the Amaya to be continued to the same point which the winze was to reach. It is probable that ore will be found by the L-130 heading at the San Marcos-Amaya junction. Another possibility for ore exists to the southwest of the present San Marcos headings. The L-130 level heading should, therefore, be driven in that direction.

THE MILL

The mill, just before its destruction, had been adjusted to a point where it could handle 50 tons per day without difficulty. The new mill will be erected on the same foundations, and in addition to having all the improvements which experience with the old mill showed are necessary, an annex for the treatment of flotation concentrates by the cyanide process will be added, provided experiments with this process prove satisfactory.

If it is possible to treat flotation concentrates locally and ship the resulting bullion, a considerable saving should be made.

Power

In order to eliminate the constant difficulties with the power end of the air compressors, it was decided in the early part of the year to drive two of these machines with the 100 H. P. Fairbanks-Morse engine, which has proved so successful in the mill, and purchase for the mill an engine of the same make but of 150 H. P. The air compressors will be moved from the present site and placed in the mill building which will do away with one operator and helper on each shift. With this new arrangement, we look for a material saving both in labor and supplies.

Means are being studied whereby it will not be necessary in the future to buy fuel oil in expensive steel drums, but to purchase it directly from tank steamers or from a storage tank located in La Union, Salvador. This should result in a very material saving, unless the steel drums become much cheaper than they are at the present time.

General

Reconstruction of the mill and assay office should be a matter of not more than four months. While it is in progress the most important development should continue. With an anticipated improvement in milling and power conditions as already explained under these headings, it is expected that operating costs per ton will be lower than was the case last year.

Renewal of the Rosario Concession

Last April the National Congress renewed the Company's concession which expired on December 31, 1920, for another twenty years. Under the terms of the new concession, the Company is exempted from payment of all federal import charges on its mining supplies, including the road tax and all export charges on its product. The new concession also grants equal privileges to any other mining property in which the Company may become interested for a term of eight years. In compensation for these privileges the Company has obligated itself to purchase and install, within a period of two years after the plans are approved by the government, a water conduit and distributing system for the capital, Tegucigalpa.

A contract was also made with the municipality of Tegucigalpa for an equal period with respect to the payment of municipal import and export taxes.

Visit of the President of the Company

In the past year we had the pleasure of two visits from Mr. W. A. Prendergast, President of the Company. Important questions, such as renewal of the concession, were taken up, as well as all others dealing with the affairs of the property.

Mr. Prendergast's visit has also permitted a closer view of your wishes and policy than ever before, which should surely result in even better administration in the future.

Standing in the Country

The standing of the Company in the country is of the highest in every respect. All questions, and there were many in the year past, which have been submitted to His Excellency, the President, General Rafael Lopez Gutierrez, or to the gentlemen composing his Cabinet, have received most courteous attention and serious consideration. We are glad to say there is every reason to believe that such pleasant relations can be expected to continue in the future.

Conclusions

In the past year several unforeseen things have happened, some of them unfortunate. Thus, the biggest flood in the history of the Company caused damage which, when repairs are concluded, will represent an outlay of about $40,000; fire destroyed the mill and assay office at Sabana Grande; the money train was robbed of $35,000, of which, however, $18,000 has been recovered, and, to almost cap the climax, silver tumbled down from about the highest price on record to pre-war figures, without, at the same time, there occurring any compensation whatsoever in an increase in the rate of exchange and decrease in the cost of supplies.

Offsetting these difficulties, and in an important measure, is the finding last May of the Salvador vein. A glance at its ore reserve figures, after only eight month's development, will indicate better than words its value. And there is every reason to believe that this reserve may be duplicated by development during the coming year. Truly, this vein has been aptly named, because without it the ore reserves, owing to the drop in silver which necessitated elimination of material formerly considered as ore, would have been very much reduced, instead of being actually greater than those of a year ago, though last year's production has been deducted. While, also, due to the drop in silver, some portions of the mine are excluded from the development program, there is, we believe, still sufficient territory extant to permit nearly as large development footage in the coming year as was the case in the year past.

As was mentioned under other headings, deterioration of plant is becoming quite noticeable. This is natural after nearly ten year's continuous use, and need cause no particular alarm. General overhauling should, therefore, take place, even if it becomes necessary to suspend operations, and before the point is reached when effective repairs can no longer be made.

From the standpoint of production, there is every assurance that, barring unforseen accidents, at least an equal amount in ounces silver, and probably gold, can be produced in the coming year; also that the operating cost per ounce silver produced will be less than in the past year. But if there is no

improvement in the price of silver or the rate of exchange, or a material decrease in the cost of supplies, it may become advisable to suspend production and await a re-adjustment of conditions in the Company's favor, as depletion of ore reserves with but little or no profit is not justifiable.

We take this opportunity to call your attention to the good and faithful service received from the staff and principal employees, and to thank them for their co-operation. We also desire to express our appreciation and thanks to you and to the gentlemen of the Board for the hearty support and confidence given us in the year past.

Respectfully submitted,

A. R. GORDON,
General Manager.

Annex "A"
Broken Ore in Stopes
December 31, 1920
(At 21 cu. ft. per ton)
Totals by Veins

Veins	Tons
Rosario	4,087
San Joaquin	5,743
North San Miguel	411
South San Miguel	3,033
Porvenir	272
Candelaria	1,487
Culebra	5,358
Buena Ventura	1,844
Northwest	1,211
Fortuna	619
Colonia	300
Grand Total	24,365

Summary of Calculated Ore Reserves
(At 13 cu. ft. per ton)

Veins	Av. Width Feet	Tons of Ore	Per Cent. Waste	Tons of Ore and Waste	Oz. Ag. Per Ton	Oz. Au. Per Ton	Total Oz. Ag.	Total Oz. Au.
North San Miguel	1.6	2,968	35.2	4,580	15.4	.06	70,532	275
South San Miguel	1.5	16,884	37.0	26,800	17.6	.07	471,680	1,608
Culebra	1.6	17,033	38.4	27,650	13.7	.07	378,805	1,935
Carmen	1.4	8,337	42.6	14,523	24.3	.05	352,903	726
San Joaquin	1.0	3,200	60.0	8,000	10.5	.18	84,000	1,440
Salvador	2.3	18,748	43.6	33,240	26.5	.07	880,860	2,326
Southwest	2.1	6,038	30.0	8,625	16.1	.06	138,862	517
Totals	1.7	73,208	40.7	123,418	19.26	.07	2,377,647	8,827

Summary of Estimated Ore Reserves
(At 13 cu. ft. per ton)

Candelaria	4,000	11.5	.075	46,000	300
Colonia	3,000	13.4	.08	40,200	240
Buena Ventura	3,000	11.8	.06	35,400	180
Esperanza	1,000	12.0	.05	12,000	50
Guadalupe	1,000	11.2	.04	11,200	40
Nueva	1,500	11.8	.06	17,700	90
Northwest	3,000	13.6	.07	40,800	210
Rosario	12,000	12.4	.08	148,800	960
West	2,000	14.0	.05	28,000	100
Jucuara	2,000	12.0	.05	24,000	100
Porvenir	2,000	12.8	.06	25,600	120
Fortuna	2,000	13.6	.07	27,200	140
Totals	36,500	12.52	.07	456,900	2,530

Summary of Estimated Fills
(At 17 cu. ft. per ton)

West	12,000	10.0	.05	120,000	600
Guadalupe	4,000	10.0	.05	40,000	200
Buena Ventura	1,500	10.0	.05	15,000	75
Northwest	1,000	10.0	.05	10,000	50
Candelaria	4,000	10.0	.05	40,000	200
Rosario	5,000	10.0	.05	50,000	250
Totals	27,500	10.0	.05	275,000	1,375

Summary

Calculated ore	123,418	19.26	.07	2,377,647	8,827
Estimated ore	36,500	12.52	.07	456,900	2,530
Estimated fills	27,500	10.00	.05	275,000	1,375
Broken ore in stopes	24,365	14.20	.06	345,983	1,462
Totals	211,783	16.32	.067	3,455,530	14,194

Average metal content per ton at mill:
Silver, 16.32 oz.
Gold, .067 oz.

Annex "C"
Development for Year 1920

Veins	Drifts	Raises	Cross-Cuts	Winzes	Totals, Feet
Colonia	117.5	.....	.....	.....	117.5
Esperanza	34.	.....	132.5	.....	166.5
Fortuna	203.5	191	15.5	.....	410
Carmen	1,272	424	138.5	.....	1,834.5
Salvador	1,059	371	23	.....	1,453
Nueva	138.5	.....	.....	.....	138.5
Guadalupe	29	16.5	.....	.....	45.5
Capitana	.....	.....	17.5	12	29.5
Socorro	66	.....	.....	.....	66
San Vicento	9	.....	.....	.....	9
Culebra	2,633	638	264.5	.....	3,525.5
South San Miguel	3,012	2,088.5	149	.....	5,249.5
Rosario	629	627.5	201.5	.....	1,458
North San Miguel	8.5	50.5	.....	.....	59
Buena Ventura	529	235.5	40.5	.....	805
Candelaria	131	147	14.5	.....	292.5
West	17	23	366.5	11	417.5
Northwest	399	31	66	39.5	537.5
Porvenir	172.5	51	.....	.....	223.5
Totals	10,459.5	4,684.5	1,431.5	62.5	16,838.0

Annex "D"

Vein Production, 1920—Dry Tons

Veins	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
San Miguel, North	521	320	315	546	362	283	467	160	130	81	138	79	3,402
San Miguel, South	2,082	2,414	1,947	2,060	2,181	1,482	2,149	2,342	1,369	2,139	1,921	2,143	24,229
Candelaria	848	680	687	668	974	866	742	586	624	767	1,013	917	9,372
Colonia	455	288	532	286	395	343	487	287	347	372	233	131	4,156
Culebra	752	453	381	522	769	411	450	1,107	985	952	906	1,014	8,702
Buena Ventura	1,508	980	559	555	378	304	576	256	511	577	451	571	7,226
Rosario	883	746	1,536	1,783	1,749	1,092	1,525	1,448	962	1,150	1,053	883	14,810
Northwest	272	437	381	601	841	600	806	460	397	345	678	934	6,752
San Joaquin	966	475	415	155	174	124	216	590	283	238	403	750	4,789
Carmen	...	101	158	261	204	236	360	343	289	332	184	278	2,746
Porvenir	...	37	44	35	43	54	109	49	40	62	60	46	579
Fortuna	...	...	...	...	...	...	...	78	65	158	143	83	527
Salvador	...	...	...	...	...	...	...	...	...	...	...	376	376
Guadalupe	30	87	382	101	...	...	...	...	...	...	...	14	614
Capitana	106	134	169	254	55	20	389	573	215	151	16	...	2,082
Nueva	...	...	...	...	...	...	269	405	130	...	...	...	804
West	120	105	68	157	74	...	...	...	...	...	...	...	524
Ore from Development	1,123	1,284	1,264	961	848	1,080	1,570	2,134	2,971	2,306	1,992	1,545	19,078
Totals	9,666	8,541	8,838	8,945	9,047	6,895	10,115	10,818	9,318	9,630	9,191	9,764	110,768

Annex "E"

Fill Production—1920

Veins	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Guadalupe	52	228	312	226	205	157	413	347	397	401	586	525	3,849
West	1,263	1,050	1,202	937	828	568	725	1,273	1,130	1,260	1,314	1,217	12,767
North West	479	395	616	351	270	321	398	599	484	379	308	214	4,814
Buena Ventura	459	250	173	274	110	33	47	20	23	14	111	143	1,657
Nueva	126	163	251	251	242	93	244	139	49	344	258	270	2,430
Rosario	11	10	...	73	174	137	117	51	114	26	...	...	713
Candelaria	210	235	282	85	213	97	226	238	392	294	444	373	3,089
Totals—Tons	2,600	2,331	2,836	2,197	2,042	1,406	2,170	2,667	2,589	2,718	3,021	2,742	29,319

Summary

Total vein production	110,768 tons
Total fill production	29,319 tons
Grand total	140,087

NEW YORK AND HONDUARS ROSARIO MINING COMPANY

Annex "B"

Tonnage Mined from October 1, 1907, to January 1, 1921

Ore from Veins	1908 Oct. to Oct.	1909 Oct. to Oct.	1910 Oct. to Oct.	1911 Oct. to Oct.	1912 Oct. to Oct.	1913 Oct. to Oct.	1913 Oct. to Jan.	1914 Jan. to Jan.	1915 Jan. to Jan.	1916 Jan. to Jan.	1917 Jan. to Jan.	1918 Jan. to Jan.	1919 Jan. to Jan.	1920 Jan. to Jan.	Total
Buena Ventura	729	19	721	120	150	2,062	512	4,131	4,715	5,134	6,637	9,840	13,862	7,226	55,858
Candelaria	11,812	23,084	17,068	8,622	7,186	9,198	2,954	15,266	12,050	5,838	7,763	6,952	9,144	9,372	146,309
Capitana	.....	.....	397	2,721	1,687	6,188	4,034	10,581	10,147	8,979	4,189	1,090	850	2,082	52,945
Carmen	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,746	2,746
Catalina	1,482	68	.....	.....	10	370	278	89	.....	50	.....	.....	.....	.....	2,347
Colonia	2,065	3,957	4,723	3,160	576	2,537	1,326	5,557	4,850	8,455	4,273	3,181	2,235	4,156	51,051
Concepcion	.....	.....	.....	806	7,348	2,121	48	5,386	2,752	.....	.....	133	576	.....	19,170
Culebra	.....	1,867	1,082	.....	.....	.....	.....	.....	.....	799	1,846	1,380	6,551	8,702	22,227
Crisanta	.....	.....	.....	.....	.....	.....	.....	.....	165	1,710	3,533	1,193	809	.....	7,410
Esperanza	7	.....	.....	.....	.....	.....	.....	2,476	3,846	1,151	457	332	.....	.....	8,269
Fortuna	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	527	527
Guadalupe	2,866	894	587	204	676	4,887	134	150	407	3,003	1,706	3,664	2,193	614	21,985
Jucuara	.....	.....	.....	.....	.....	.....	.....	.....	508	1,342	357	.....	.....	.....	2,207
North	2,434	1,424	148	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,006
Northwest	1,706	221	44	120	.....	.....	54	4,897	3,319	2,013	1,831	1,359	1,307	6,752	23,623
Nueva	3,543	2,228	843	220	89	1,081	519	3,670	1,854	636	.....	.....	.....	804	17,487
Porvenir	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72	213	579	864
Rosario	28	332	1	3,030	466	7,108	4,939	11,830	10,652	11,715	11,315	8,439	11,529	14,810	96,194
San Joaquin	.....	.....	.....	.....	.....	.....	65	5,239	12,288	11,304	8,945	7,606	6,638	4,789	56,874
San Miguel (North)	.....	.....	10,322	17,062	20,851	24,728	9,465	33,241	16,690	10,250	16,625	6,273	5,532	3,402	174,441
San Miguel (South)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,194	16,539	25,911	24,229	70,873
Salvador	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	376	376
Socorro	2,827	1,001	693	138	18	.....	.....	216	918	3,258	3,587	3,661	3,493	.....	19,810
Southwest	.....	.....	.....	.....	201	5,124	1,872	4,120	2,889	4,009	394	152	.....	.....	18,761
West	17	.....	5	.....	.....	.....	.....	.....	.....	1,867	5,400	2,950	1,324	524	12,087
Ore from Development	2	.....	.....	.....	.....	.....	.....	.....	4,120	6,471	4,246	7,358	12,117	19,078	53,392
Miscellaneous	.....	715	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	715
Total	29,518	35,810	36,634	36,203	39,258	65,404	26,200	106,849	94,170	87,984	87,298	82,174	104,284	110,768	942,554
Stope Fill															
Buena Ventura	.....	.....	.....	.....	.....	.....	.....	.....	3,507	7,019	6,255	8,886	5,405	1,657	32,729
Candelaria	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	471	1,246	1,457	3,089	6,263
Guadalupe	.....	.....	.....	.....	.....	.....	.....	.....	4,105	8,123	7,937	9,125	3,827	3,849	36,966
Northwest	.....	.....	.....	.....	.....	.....	.....	.....	2,759	9,402	5,509	8,601	5,947	4,814	37,032
Nueva	.....	.....	.....	.....	.....	.....	.....	.....	.....	504	2,918	2,210	1,369	2,430	9,431
Rosario	.....	.....	.....	.....	.....	.....	.....	1,920	3,793	3,092	2,755	3,026	14	713	15,313
West	.....	.....	.....	.....	.....	.....	.....	401	9,344	11,906	12,757	14,632	11,699	12,767	73,506
Total	.....	.....	.....	.....	.....	.....	.....	2,321	23,508	40,046	38,602	47,726	29,718	29,319	211,240
Grand Total	29,518	35,810	36,634	36,203	39,258	65,404	26,200	109,170	117,678	128,030	125,900	129,900	134,002	140,087	1,153,794

New York and Honduras Rosario Mining Company, New York City

Balance Sheet

December 31, 1920

Assets

PERMANENT—			
Mines, Real Estate and Concessions		$3,000,000.00	
Plant Buildings, Machinery and Equipment	$1,187,081.55		
Less: Allowance for Depreciation	552,806.18	634,275.37	$3,634,275.37
CURRENT—			
Cash		$ 470,376.54	
Bullion on Hand and in Transit at Market		231,770.48	
Broken Ore in Stopes and Mill Bin at Cost		120,977.55	
Materials and Supplies		403,392.77	
U. S. Liberty Bonds at Market		179,822.22	1,406,339.56
OTHER ASSETS—			
Investment in Stock of Other Companies		$ 51,853.00	
Advances to Other Companies Less Reserve		78,531.47	
Miscellaneous Accounts Receivable		6,079.47	136,463.94
DEFERRED CHARGES—			
Unexpired Insurance and Prepaid Taxes			7,708.73
			$5,184,787.60

Liabilities

CURRENT—			
Acceptances and Drafts Payable		$ 85,462.09	
Accounts Payable		61,230.83	$ 146,692.92
DEFERRED CREDIT			2,375.94
RESERVES—			
Depletion of Mines		$1,429,262.62	
Exchange Fluctuation		129,993.25	
Mine Fire Insurance		23,258.48	
Contingencies		50,000.00	1,632,514.35
CAPITAL STOCK—			
Authorized and Issued 200,000 Shares, Par Value $10 per Share		$2,000,000.00	
SURPLUS—			
Appreciation of Mine Valuation Less Depletion	$ 884,962.50		
Earned Surplus	518,241.89	1,403,204.39	3,403,204.39
			$5,184,787.60

New York and Honduras Rosario Mining Company, New York City

Income and Profit and Loss Statement for the Year Ended December 31, 1920

Production of Gold and Silver	$1,568,612.32	
Less: Freight and Expenses on Bullion	56,877.31	
OPERATING INCOME		$1,511,735.01
Operating Expenses		1,125,196.19
OPERATING PROFIT		$ 386,538.82
New York Administrative Expenses		67,498.26
NET INCOME FROM OPERATING		319,040.56
Other Income		34,895.52
TOTAL INCOME		353,936.08
Deductions from Income		107,232.82
NET PROFIT FOR PERIOD		$ 246,703.26
Appropriated for Reserves:		
Fire Insurance	$ 4,123.52	
Reducing Liberty Bonds to Market Value	30,912.20	35,035.72
PROFIT AND LOSS BALANCE CARRIED TO SURPLUS		$ 211,667.54

Surplus

Surplus January 1, 1920		$2,657,455.42	
Deduct: Reserve for Depletion of Mine, 1920	$350,250.00		
Dividends paid in 1920	320,000.00		
Amortization paid 1920	80,000.00		
Amortization Distributions previously charged to Reserve for Depletion	500,000.00		
Reserve for Advances to Sabana Grande Honduras Mining Co. previously charged to Reserve for Depletion	200,063.86		
Increasing Reserve for Contingencies	15,604.71	1,465,918.57	1,191,536.85
SURPLUS DECEMBER 31, 1920			$1,403,204.39

Auditors' Certificate

WE HEREBY CERTIFY that we examined the books of account and records of the NEW YORK AND HONDURAS ROSARIO MINING COMPANY for the year ended December 31, 1920, and subject to the fact that we did not examine the records of the Mine Office in Honduras it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at the date stated and that the relative Income and Profit and Loss Account is correct.

ERNST & ERNST.

New York and Honduras Rosario Mining Company

Comparative Statement of Working Capital

December 31	1913	1914	1915	1916	1917	1918	1919	1920
Cash and Cash Items	$106,866	$ 90,618	$112,208	$ 259,459	$ 515,562	$ 684,899	$ 380,965	$ 650,199
Bullion in Transit	207,438	252,348	271,735	353,115	325,260	387,348	805,137	231,770
Ore in Stopes and Mill Bin	89,077	96,884	99,951	122,873	121,171	112,125	95,133	120,977
Inventories and Supplies	250,940	272,805	292,731	300,759	427,908	438,427	377,166	403,393
Accounts Receivable	41,805	5,020	1,896	66,497	115,303	62,683	117,876	13,788
Total Quick Assets*	$696,126	$717,675	$778,521	$1,102,703	$1,505,204	$1,685,482	$1,776,277	$1,420,127
Current Liabilities†	91,344	71,138	59,026	257,498	567,783	694,373	522,062	199,069
Net Working Capital	$604,782	$646,537	$719,495	$ 845,205	$ 937,421	$ 991,109	$1,254,215	$1,221,058
Increase over Preceding Year		41,755	72,958	125,710	92,216	53,688	263,106	
Decrease from Preceding Yr.								33,157
Increase over Dec., 1913, Working Capital		41,755	114,713	240,423	332,639	386,327	$ 649,433	$ 616,276
Increase in Investments over 1913		38,309	43,781	103,521	134,794	321,015	442,550	330,448
Additions to Plant, Etc., since 1913							260,758	271,884
Increase in Assets since 1913‡							$1,352,741	$1,218,608

* Embraces all Cash in Banks and Agencies, Accounts and Notes Receivable, Inventories, but does not include Plants' Real Estate, Mining Property, Equipment nor Investments.

† The Liabilities embrace everything except Capital Stock, Surplus and Reserves.

‡ Excludes increase valuation of mine.

Table Showing

Bullion Production

1882	$ 2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	763,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912–13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
Total	$29,887,798.10

Distributions to Stockholders

1887 No. 1	$ 37,500— 2½%	Dividend
1888 Nos. 2 to 5	60,000— 4%	Dividend
1889 Nos. 6 to 14	150,000—10%	Dividend
1891 Nos. 15 to 16	30,000— 2%	Dividend
1892 Nos. 17 to 21	165,000—11%	Dividend
1893 Nos. 22 to 25	150,000—10%	Dividend
1894 No. 26	37,500— 2½%	Dividend
1896 Nos. 27 to 28	30,000— 2%	Dividend
1897 Nos. 29 to 40	180,000—12%	Dividend
1898 Nos. 41 to 48	120,000— 8%	Dividend
1899 Nos. 49 to 60	180,000—12%	Dividend
1900 Nos. 61 to 75	225,000—15%	Dividend
1901 Nos. 76 to 93	300,000—20%	Dividend
1902 Nos. 94 to 100	105,000— 7%	Dividend
1903 No. 101	15,000— 1%	Dividend
1904 Nos. 102 to 108	105,000— 7%	Dividend
1905 Nos. 109 to 121	180,000—12%	Dividend
1906 Nos. 122 to 139	285,000—19%	Dividend
1907 Nos. 140 to 153	210,000—14%	Dividend
1908 Nos. 154 to 165	180,000—12%	Dividend
1909 Nos. 166 to 173	120,000— 8%	Dividend
1910 Nos. 174 to 180	105,000— 7%	Dividend
1911 Nos. 181 to 182	90,000— 6%	Dividend
1912 Nos. 183 to 184	70,000— 3½%	Dividend
1913 Nos. 185 to 188	180,000— 9%	Dividend
1914 Nos. 189 to 193	240,000—12%	Dividend
1915 Nos. 194 to 197	240,000—12%	Dividend
1916 Nos. 198 to 205	400,000—20%	Dividend
1917 Nos. 206 to 211	300,000—15%	Dividend
1917 No. 1	100,000— 5%	Amortization
1918 Nos. 212 to 215	200,000—10%	Dividend
1918 Nos. 2 to 5	200,000—10%	Amortization
1919 Nos. 216 to 219	200,000—10%	Dividend
1919 Nos. 6 to 9	200,000—10%	Amortization
1920 Nos. 220 to 223	320,000—16%	Dividend
1920 Nos. 10 to 11	80,000— 4%	Amortization
Total	$5,790,000	

Dividends 1 to 182, inclusive, on Capital Stock	$1,500,000.00
Dividends 183 to 223, inclusive, on Capital Stock	2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, on Capital Stock	2,000,000.00

REPORT *of the*

NEW YORK & HONDURAS ROSARIO MINING CO.

1921

NEW YORK
January 1, 1922

OFFICERS 1922-1923

LEWIS L. CLARKE.....*President*
H. A. GUESS.....*Vice-President*
A. R. GORDON.....*Vice-President*
W. C. LANGLEY.....*Treasurer*
J. PERLMAN.....*Secretary*

BOARD OF DIRECTORS 1922-1923

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY — W. C. LANGLEY
LEWIS L. CLARKE — W. L. SAUNDERS
H. A. GUESS — E. V. SOTO
IRVING HEIDELL — AMBROSE G. TODD
J. C. F. JACOBY — DR. JULIUS J. VALENTINE

P. R. WEILER

EXECUTIVE COMMITTEE 1922-1923

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY — AMBROSE G. TODD
H. A. GUESS — P. R. WEILER

W. L. SAUNDERS

LEWIS L. CLARKE, W. C. LANGLEY } *Ex-Officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company

NEW YORK, January 1, 1922.

To the Stockholders and Directors of the
NEW YORK & HONDURAS ROSARIO MINING COMPANY:

GENTLEMEN:

The condition of the silver market and the high expenses of operation, set forth in the last annual report, clearly indicated the necessity of some drastic action in handling the Company's business, unless there should develop a very favorable reaction. Unhappily, no such change occurred, and it was announced at the last annual meeting that the Directors had decided to discontinue operations. It is needless to say that this course was taken only after the most thorough consideration, and then with the greatest regret because of the loss in returns to our stockholders.

It should be said, however, that the suspension of operations has been of considerable advantage to the Company, for these reasons:

First, it has enabled the management to make many needed repairs and changes in the plant, and

Second, it has made it possible to introduce a large number of readjustments in the conduct of the business, which will place the Company on a more economical basis of expenditure.

From the time the plant was closed at the end of April, 1921, your Directors continued a careful observation of the trend of market elements which particularly affect our business, with a view to resuming operations at the earliest possible date. It did not seem to us that the favorable period had arrived until the month of August, when, after calculating the possibilities of

profitable operation on the basis of an entirely new price level for labor and other items of expense, the Vice-President and General Manager, Mr. Gordon, was advised to resume. At that time the plant was being renovated, and this, with the further fact that it naturally would require a considerable time in which to put the property in good operating condition, prevented any continuous and satisfactory production until the very end of the year.

We must be gratified that the cessation of operations was not of longer duration, and trust there will be no interruption in the Company's service to its stockholders from this time on. It should be understood that it may be some time before it will be possible to bring the production to as large a figure as formerly, although we hope to attain that end in a manner consistent with the more economical policy the Company has now adopted.

FINANCIAL MATTERS

It would not be profitable to attempt any comparison of the financial results of operations between the past year and that preceding, for the reason that owing to the suspension of active work, the elements of an annual comparison are lacking.

It is useful, however, to call attention to a few of the salient features of the Company's financial affairs. Chief among these is the fact that, despite the inevitable loss due to suspension, the Company's condition continues to be most satisfactory.

Your attention is especially invited to the "Balance Sheet" and "Income and Profit & Loss Statement" which are a part of this annual report.

The significant points in the "Balance Sheet" are the statements of "Current Assets" and "Current Liabilities". The "Current Assets", amounting to $1,115,941.19, are as follows:

Cash	$ 32,458.52
Call loans Receivable plus interest	251,111.09
Bullion on hand at Mine, at Market	1,144.54
Broken ore in Stopes and Mill Bins at cost	114,217.38
Material and Supplies at Cost	308,464.11
U. S. Securities at Market plus interest	333,432.19
Foreign Government Bonds at Cost, plus interest	25,176.37
Domestic Railroad Bonds at Cost, plus interest	49,876.50
Sundry Accounts Receivable	60.49
	$1,115,941.19

It has been the Company's policy, as the foregoing table will indicate, to employ in the most productive way possible the liquid assets available. To this end every dollar that could be invested in either short term loans or long term securities of unquestioned value has been made to earn a return for the Stockholders, with most pleasing results, especially at a time when the Company's regular sources of income were necessarily curtailed.

The "Current Liabilities" are $218,387.20, but only $18,387.20 of this amount represents indebtedness due to the regular currents of business. The balance $200,000, as you will observe, covers the estimated amounts payable for Federal Income and Profits Taxes for prior years, viz., 1917-1921, inclusive.

This is the first time it has been possible even to estimate this liability, as our Company, like all other mining companies, has been negotiating with the Government for several years in order to determine the basis for charging depletion and other matters in connection with Income Tax calculation. We have arrived at an understanding with the Government. This has enabled us to identify the approximate amount of this liability as $200,000, but it should be understood that this sum is the accumulation of the years mentioned, 1917-1921, inclusive, and that the amount which will be paid for each year is really a charge against that particular year.

It is gratifying to state that although faced with very serious conditions during the past year, the Company did not depart from its long and honorable record as a dividend paying concern, as shown by the dividend of $60,000 paid in January, 1921.

CONCESSION

The Company had been of the opinion, as stated in the last annual report, that its obligation to fulfill the terms of the concession contract, by installing a new water supply system for the cities of Tegucigalpa and Comayaguela, required the plant to be installed by September, 1922. The Government of Honduras believed that the contract term expired within two years from the passage of the Congressional Decree, which would make the expiration date April 27th, 1922. This difference of

opinion was accentuated by the fact that the people of the cities mentioned have suffered considerably by the absence of an adequate water supply. This question was composed most satisfactorily with the Government of Honduras, under an arrangement which by its terms required us to complete the work *to* the *cities* by April 27th, 1922, but to defer the necessary work *in* the cities until April 27th, 1923. Consequently, orders were placed for the necessary supplies, the work was started last November, and will be completed in accordance with our agreement.

SAN MARCOS MINE AT SABANA GRANDE

In view of the general conditions which have been described in this report, it was thought inexpedient to continue any work at this property during the past year.

The machinery for the new mill has all been purchased and is on hand at the mine, and the insurance loss has been collected. It is our feeling that in order to make operations at this property safely profitable there will have to be an exemption from taxes on supplies. Some reductions have already been granted by the Honduras Government, which is also considering additional measures of relief suggested by our General Manager.

EXPANSION

The Company has considered new properties in Central America, Mexico and the United States of America during the past year. None of these propositions was acceptable. It is our aim to secure new properties if they can be advantageously acquired.

GOVERNMENT OF HONDURAS

The Company has enjoyed the pleasantest relations with the Government of Honduras, and received many courtesies from his Excellency, President Rafael Lopez Gutierrez to whom it conveys its cordial acknowledgments.

AUDIT

The books of the Company have been audited by Messrs. Ernst & Ernst.

Respectfully submitted,

LEWIS L. CLARKE,
President.

Annual Report of the General Manager

JANUARY 1, 1922.

TO THE PRESIDENT,
17 Battery Place,
New York, N. Y.

DEAR SIR:

In the following we lay before you a brief report of operations during the fiscal and calendar year 1921.

SUSPENSION OF OPERATIONS

In the report for the year 1920 it was stated that unless there is an "improvement in the price of silver or the rate of exchange or a material decrease in the cost of supplies it may be advisable to suspend production and await a readjustment of conditions in the company's favor, as depletion of ore reserves with but little or no profit is not justifiable." After very careful consideration of the problem, first in New York City with you, and then upon our return to Honduras in March, it was agreed that the best interests of the company would be served by the suspension of all operations. This was accordingly done, and on April 22nd when the Mill ceased running, the suspension period was considered as in effect. Sufficient men were retained to keep open the Mine and to maintain the surface plant. The garrison and police were strengthened to assure better protection.

Advantage was taken to effect some of the most necessary repairs and replacements, and *without which operations could not have continued another year.* Such work is by no means concluded, but what remains we believe can be done without serious interruption to future production operations. Under other headings, we go into more detail concerning some of this repair work.

RESUMPTION OF OPERATIONS

On December 22nd, just eight months after suspension of operations, the Mill commenced treatment of ore at about one-third capacity or 150 tons per day. The belief is that conditions are now sufficiently favorable to permit operation at a moderate profit.

The resumption of operations is not due to any great improvement in one or even two factors which enter into profitable operation of the property, such for instance, as a very material rise in the price of silver or very favorable rate of exchange, but to a combination of small improvements and economies in every branch of the work, which the more independent position of the company, due to the entire suspension of its operations, has permitted it to effect. To go into details concerning all these changes at this time would, we believe, be premature. The test of eight or more months continuous operation on the new basis is required before anything definite can be said regarding actual economies. We will state, however, that we believe operations have been resumed at the lowest possible limit as regards wages, the cost of local supplies and reduction of overhead in all departments that the nature of the mining business, particularly when conducted abroad, permits. Readjustments here and there will have to be made as work develops on a larger scale, but the important economies made are to stand.

The most uncertain factor is that of native labor. Rosario is one of the very few enterprises where there was no increase in wages during the period of world wide inflation, and the last time the question of wages was taken up with the men was in 1907, when about a 15% cut was made. Therefore in instituting a further cut now we are doing so under very different circumstances than is the case nearly everywhere else. But the cost of living has dropped and our resumption program embraces further extension of the piece work method of doing various classes of work, and we believe that with these two things combined, the more efficient and steady men will be just as well off as before. To keep the cost of living within bounds, we are prepared to start a kitchen, where meals will be served to the

native workmen at actual cost, and consequently cheaper than is possible by small individual boarding houses.

We will probably have to get along with a small force for quite some time, which means that we will get back to a retail or selective basis of mining, that is, five to six thousand tons per month of high grade ore, as compared with a wholesale basis of twelve to thirteen thousand tons of low grade, as before the shut down. Fortunately the condition of the mine is such that it can sustain a retail basis for quite a considerable time. This can be seen by examining the statement of ore reserves submitted with this report.

PRODUCTION OPERATIONS

Production operations during the year covered a period from January 1st to April 22nd. As no consistent comparisons can be made with the year previous, these have been left out, excepting in cases where they are of value.

Production

	1921	1920
Dry tons treated	43,920	140,100
Ounces silver produced	657,250	1,711,349
Ounces gold produced	3,325	8,001
Ratio of silver to gold	213	214
Bars Doré Bullion shipped	415	1,097
Bullion fineness	973.92 Ag. 4.93 Au.	968.44 Ag. 4.53 Au.

The ore treated averaged 17.17 ounces silver and .081 ounces gold per ton, against 14.19 ounces silver and .057 ounces gold for the year previous.

THE MINE

Ore Reserves

The summary of the total ore reserves as existing on January 1st, 1922 is here given. On annex "A" we show the distribution of these reserves in the different veins.

Summary

	Tons of Ore and Waste	OZ. AG. Per Ton	OZ. AU. Per Ton	Total OZ. AG.	Total OZ. AU.
Calculated ore, at 13 cu. ft. per ton	125,302	20.05	.059	2,512,978	7,409
Estimated ore, at 13 cu. ft. per ton	31,100	12.50	.068	389,260	2,117
Estimated fills, at 17 cu. ft. per ton	22,500	10.00	.050	225,000	1,125
Broken ore in stopes, at 21 cu. ft. per ton	23,672	14.20	.060	336,142	1,420
Totals	202,574	17.09	.059	3,463,380	12,071

Average metal content per ton at mill:
Silver, 17.09 oz.
Gold, .067 oz.

The ore reserve figures in this report are based on the same calculations as those shown in the last or fortieth annual report. Deductions in round numbers have been made of ore mined during the year, and additions in cases where ore has been found by the 6,904 feet of development work. A striking instance of the latter is that of the Salvador vein where, after deducting the ore mined, we are able to show an increase of 331,069 ounces silver.

A very complete milling test of Salvador ore showed that the gold associated with 25 to 30 ounces silver ore is about .04 ounces and not .07 ounces as shown in the 1920 report. Therefore, the gold content of the entire vein has been revised to conform to the lower figure.

Development

The amount of development done during the year was 6,904 feet, distributed as shown on the following comparative summary. On annex "B" we show the amount of development done in each vein.

Year	Drifts	Raises	Cross Cuts	Winzes	Total
1920	10,459.5	4,884.5	1,431.5	62.5	16,838.0 feet
1921	4,610.5	1,248.0	975.0	70.5	6,904.0 feet

The 1920 development program, based on $1.00 silver, was maintained until the suspension of operations. In July develop-

ment was resumed, on one shift only, in the Esperanza section, and mostly in the Salvador vein.

The magnitude of the development program in the coming year will depend mainly upon three things; the price of silver, the rate of mining and the grade of the ore it is necessary to produce. The rate of mining and the grade of the ore will in turn depend very much upon the amount of competent labor available under readjustment conditions of operation.

Of the 6,904 feet of development, 2,503.5 feet were done in the Salvador vein.

Ore Production

The following is a segregation of ore and fill mined during the year. Annexes "C" and "D" show this production in detail:

	1921	1920
Ore broken from veins	29,625	92,167 tons
Ore from development of veins	5,663	12,117 tons
Stope fill mined	8,602	29,178 tons
Total delivered to the mill	43,890	134,002 tons
Percentage fill mined	19.6	20.9
Number of producing veins	17	17

On annex "E" is shown the ore production from each vein worked since the year 1908.

Veins Worked During the Year 1921

Owing to the very limited amount of work done in the mine during 1921, the status of the different veins is very nearly the same as stated under this heading in the 1920 report.

The only exception is the Salvador vein where intensive development, amounting to 2,503.5 feet, responded quite favorably, as can be seen by examining the ore reserve figures, and comparing these with the year previous.

A shaft is being sunk from the U-150 level and in the latter part of 1922 it should be deep enough to intersect the Salvador vein at a new level, the Zero, 125 feet below the U-150, where we hope to encounter a fair tonnage of good grade ore. The shaft will be continued for at least 150 feet below the Zero.

This shaft will also serve to explore the Fortuna and Carmen veins below the U-150 level, where we have reason to believe important ore bodies will be found.

Future Development

Irrespective of the scale on which production operations are carried during the coming year 1922, development in the Esperanza section and particularly in the Salvador vein, should proceed with greatest intensity. The ore reserves already brought to light indicates its importance. The possibilities for large quantities of ore below the U-150 level we believe to be very good, and this territory we will commence to explore toward the end of 1922, and as soon as the shaft now being sunk reaches the required depth.

The best ore possibilities in the Salvador and Carmen veins seem to lie in a southerly direction, therefore, these headings should be given the preference above all other development. The northerly headings also have good possibilities and should be of next importance. The territory above the present workings is very extensive, and holds out good possibilities for ore, therefore, it should be explored without delay.

The Esperanza cross-cut which has already disclosed a considerable tonnage of good grade ore, should by all means be continued, so long as it is headed into extensive territory, and is in the same kind of rock as that which produced the Salvador, Carmen, Fortuna and Porvenir veins. In the past year this cross-cut intersected several small veins. One of these, about 270 feet west of the Salvador vein, though valueless at the point of intersection, merits development, particularly to the south.

The Porvenir vein, also in the Esperanza section, owing to its being under the highest part of the mountain, should be explored above its present workings.

The Thermopilas vein on which a small amount of development and stoping was done very many years ago, has never been located in the main Rosario mine workings and probably because it has always been assumed that it had no depth. There seems to be no sound reason for such assumption, therefore, efforts

should be made to locate it at the U-150 level, by driving a crosscut about 400 feet in length.

The Culebra vein, which in the past three years was a very heavy ore producer, has not been thoroughly explored below the U-450 level. The present U-250 and U-350 levels should, therefore, be extended well under the workings above the U-450, as the chances for an important quantity of medium grade ore are good.

Mine Equipment

The two mine air compressors received a thorough cleaning and overhauling, and are now in shape to render satisfactory service for many years to come.

Over half of the underground piping, ranging from 10 inches diameter to 2 inches diameter, and comprising many thousands of feet, is, on the other hand, in bad shape, owing to very long service and contact with acid water. It was not possible to give attention to its repair during suspension of operations, but it is possible that in the coming year the worst sections will be taken care of.

The most vital underground equipment, namely, the track and cars, is in a pretty bad condition. The past six years of ever increasing ore demands and of greater development has given but little opportunity to effect repairs, and needed equipment was not bought, owing to its very high cost up to a very short time ago. As soon as it possibly can be done this equipment, both by repairs and replacements, must be brought up to standard, so that tramming costs can be kept to a normal figure.

THE MILL

Tonnage Crushed

	1921	1920
Total wet tons received	48,967	153,667
Average per cent moisture	10.4	8.8
Total dry tons milled	43,920	140,100
Average tons per day milled (365 days)	120.3	383.8
Average tons per day milled, full running time (109.918)	399.6	....
Average tons per day milled, full running time (339.2)	....	413
Average tons per day milled, per 1850 lb. stamp, full running time	20.0	20.6
Number of 1850 lb. stamps	20	20

Recovery

Average ounces silver received, per ton....	17.172	14.193
Total ounces silver received.....	754,189.75	1,988,372
Average ounces silver recovered, per ton...	14.955	12.215
Total ounces silver recovered.....	657,250.00	1,711,349
Average silver recovery, per cent.....	87.146	86.07
Average ounces gold received, per ton.....	.0805	.0604
Total ounces gold received.....	3,533.876	8,465
Average ounces gold recovered, per ton....	.0757	.0571
Total ounces gold recovered.....	3,324.715	8,001
Average gold recovery, per ton.....	94.081	94.52

Supplies Used per Ton

Sodium cyanide, 96-98%.....	2.420	3.166
Sodium cyanide, 37-41%.....	2.825	....
Zinc Dust (29,451 tons).....	.671	.686
Lime %45.4 available.....	....	22.985
Lime %46.1 available.....	27.902	....
Tube mill pebbles (local).....	43.835	40.272
Tube mill pebbles (foreign).....	....	.471

We make the above comparisons with the year previous, to show that during the short period the mill ran, it did so at the same, and from the standpoint of silver extraction, even better efficiency.

Advantage of the suspension period was taken to make some of the most urgent repairs, the necessity of which was already mentioned in our 1920 annual report.

All heavy timber work in such places as the crusher station and ore bin, and which ten years of exposure and use had left in a weakened condition, has been entirely replaced.

The four stamp batteries were particularly in bad shape, so received special attention. None of this work could have been done while the mill was running. All other milling units, such as tube mills, pumps, classifiers were thoroughly gone over and long needed repairs made. The mill air compressor, for sometime a source of trouble and inefficient service, was replaced by virtually a new machine, as the only parts from the old one used were the flywheel, shaft and connecting rods. More compressed air is now obtained for less power input, and all operating trouble eliminated. All the principal mill piping was disconnected and repaired, and tons of incrustation and sediment removed. The Merrill Slime Filter Presses received the first thorough overhauling since their installation ten years ago. New launders were installed throughout the mill, and this time lined with re-

movable chrome steel plates made from worn out tube mill liners. Rearranging the classifiers and shifting them to one side permitted the installation of a track directly over the tube mills, thus permitting them to be quickly charged with home made pebbles, directly from a car, thereby eliminating the labor of several men.

All these repairs and replacements have put the milling department of the plant in shape for at least six or more years continuous operation, at relatively small upkeep cost.

In the cyanide department of the plant, where most of the equipment consists of steel tanks, but little repair work has been done. A good deal of it is urgent, as leaks are developing. In the coming year, we expect to patch up the worst places by the Electric Arc Welder.

The question of maintaining the silver recovery above 86½% in the face of increasingly refractory ore has had our most serious study. Eighty-six to eighty-seven per cent. recovery of the silver is probably the average of most mills, but we believe that here it should be higher.

Experiments with all practical variations in strength of chemicals, and time of treatment, lead to the belief that better silver recovery does not lie so much in these directions as in finer grinding of the ore. Most of the silver not responding to treatment seems to be tied up with some exceedingly dense substance, lead sulphide probably, and which only very fine grinding would liberate. In the coming year, therefore, we contemplate installing either an additional fine grinding tube mill, already on the property, or some sort of flotation unit to remove the sulphides from the plus 150 mesh sands, returning these sulphides for regrinding.

We believe that the improvements already made, together with those contemplated for the coming year, should result in a little better silver recovery. The rearrangement of some units and addition of labor saving devices, made possible by the shut down, should permit just as efficient operation with a smaller force than has been possible heretofore. So it is expected that in the coming year the mill should show somewhat better results, both from the metallurgical and the operating standpoint than has been the case for two or three years past.

HYDRO ELECTRIC POWER PLANTS

A few weeks before operations ceased, a serious leak developed in the Guadalupe pipe line. Upon inspection it was found that though the paint was in good condition the entire pipe line, 20 inches in diameter and 2,350 feet in length, had become deeply pitted underneath it in hundreds of places and in most cases at or near the riveted joints. In effecting repairs steel plate patches were electrically welded on wherever needed and the extent of this work has proved to be such that it will take about three more months before it is concluded. We believe, however, that with these repairs the pipe should last ten or more years. The Guadalupe plant itself has received a complete overhauling and is now in first class shape.

Inasmuch as it was necessary to keep the San Juancito plant running while Guadalupe was undergoing repairs there was no opportunity to give it thorough overhauling. This, however, shall be done in the coming year.

The successful operation of the property depends considerably upon adequate rainfall and its distribution throughout the year. Even though there may be a decrease in the amount of rain during one year, as compared with another, if the smaller volume is spread over a greater number of days it enhances the power very considerably.

From the following comparative table it can be gathered that though the rainfall for the two years is practically the same, that in the year past, owing to better distribution, would have produced more power.

	1921	1920
Total rainfall	70.82 inches	71.18 inches
Number of days during which rain fell	193	179
Greatest rainfall in any one month	15.59 (June)	16.19 (June)
Greatest single rainfall	4.00	5.57

Flume Lines

Excepting about 3,000 feet of the Guadalupe flume, which is new, the remaining 3,000 feet is in such bad shape that power from the Guadalupe plant is very unreliable. In a short time, the same is liable to be the case with the San Juancito plant, as the 17,000 feet of flume serving this plant is deteriorating quite

rapidly, though undergoing constant repair. The only remedy is, of course, new flumes, and it is planned to do as much of such installation as is possible in the coming year.

The canal carrying away the mill tailings and which is 12,000 feet in length, is also in bad shape, but we believe by constant repairs can be made to last awhile longer.

Heretofore we have been somewhat limited in building new flumes because of the scarcity of pine lumber, excepting at what we consider exorbitant prices. But in the past year a pine forest on the company's Jucuara Zone has been made accessible by a three mile road, so for sometime we are reasonably assured of a moderate supply of lumber at more reasonable cost.

HONDURAS STORE

It was found advisable to discontinue the Honduras Store, because the small yearly profit does not cover the responsibility involved. The stock, a good deal of it bought at peak prices, is being disposed of at the best possible figures, but, of course, at a loss.

OTHER DEPARTMENTS

With the exception of School, Garrison and Medical maintenance, the cost of which in each case was about the same as in the year previous, there has been a very considerable reduction in the cost of such items as Roads, Agencies, Hotel and Laboratory, due to the suspension of operations.

EXPANSION

Several mining properties brought to our attention during the year were examined, but none merited further interest.

The policy is to keep in full touch with everything having to do with mining in Honduras, and whenever a mining proposition is brought to us it is given careful consideration even though the chances as to its success appear very slight.

SABANA GRANDE

The San Marcos Mine which is the property of the Sabana Grande Honduras Mining Company, was closed down at about

the same time as Rosario and for the same reasons. The underground shaft was allowed to fill with water to avoid the high cost of pumping. The main adit level, however, is being kept open.

Reconstruction of the flotation mill and assay office, destroyed by fire on December 15th, 1920, is about two-thirds completed. As soon as arrangements can be made to obtain fuel oil, the cost of which represents about 23% of the total operating costs, at a more reasonable figure, work is to be resumed in all departments. All other matters pertaining to the property are exactly the same as stated in our report of last year.

The best of care is being taken of the new machinery and supplies as well as of all the buildings and equipment.

ROSARIO CONCESSION

Work is well under way on the pipe line which is to supply the cities of Tegucigalpa and Comayaguela with water and which represents a portion of the work the company is obliged to do under the terms of the concession granted by the National Congress in April, 1920.

The concession stipulates that the entire project be completed by May, 1922. But early in the year the government, taking into consideration the general business depression, granted an extension of one year for some of the work. This extension has proved doubly beneficial, to the government because it now receives a better and considerably heavier pipe than is called for in the contract and to the company because, by having more time in which to make the purchase it was in a position to take advantage of a very material drop in prices.

STANDING IN THE COUNTRY

Most pleasant relations continue to exist between the government of Honduras and the company. His Excellency the President General Rafael Lopez Gutierrez being a mining man himself takes a keen interest in our problems, and has stood ready to extend help whenever this was needed and he could do so. The members of his Cabinet and other officials have also been most considerate.

CONCLUSIONS

In reviewing what has been done in the year just closed we find that though from the standpoint of production nothing of course can be said, from that which has to do with future operations some solid foundations have been laid on which we hope to build up a more efficient and considerably more economical organization.

The condition of the mine to-day is such that under this organization it should again resume operation at a profit. How substantial that profit is to be will depend a good deal upon the price of silver, and the extent to which labor responds to the changed conditions. In former years, and when nearly one-third of the entire production was in gold, it was possible to operate at a good profit with silver as low as fifty cents per ounce. But in recent years, owing to exhaustion of the principal gold bearing veins, the gold output has dropped very considerably and silver has had to take its place with the result that in the beginning of the year just closed, and when silver was still between sixty and sixty-five cents, it was found advisable to close the property down.

Actual production operations during the coming year will show beyond a doubt the extent of the permanent economies effected. Because of that we go into no great detail as to what has been accomplished in that direction in the year past.

Operations have been resumed because it is believed this can be done at a fair profit. The condition of the mine is such that with circumstances no worse than they are to-day such fair profit is assured.

We wish to thank you and the gentlemen of the Board of Directors for the full support and confidence given us in the year past, and without which what has been accomplished would not have been possible.

Respectfully submitted,

A. R. GORDON,
General Manager.

ANNEX "A"

BROKEN ORE IN STOPES

DECEMBER 31, 1921

(At 21 Cubic Ft. Per Ton)

TOTAL BY VEINS

VEINS	TONS
Culebra	4,934
South San Miguel	778
South San Miguel Hilo	1,850
Salvador	2,290
Fortuna	1,800
Rosario	3,322
Candelaria	1,310
San Joaquín	2,216
Colonia	300
In Chute No. 51	3,572
In Chute No. 36	800
In Chute No. 8	500
GRAND TOTAL	23,672

SUMMARY OF CALCULATED ORE RESERVES

(at 13 cu. ft. per ton)

VEINS	Av. Width Feet	Tons of Ore	Per Cent Waste	Tons of Ore and Waste	Oz. Ag. per ton	Oz. Au. per ton	Total Oz. Ag.	Total Oz. Au.
North San Miguel ...	1.6	3,009	35.2	4,644	15.4	.06	71,518	279
South San Miguel. ..	1.5	14,281	37.0	22,669	17.6	.07	398,974	1,587
Culebra	1.6	14,493	38.4	23,527	13.7	.07	322,320	1,647
Carmen	1.4	7,200	42.0	12,414	24.3	.05	301,660	621
San Joaquín.	1.0	2,580	60.0	6,449	10.5	.18	67,715	1,161
Salvador ...	2.6	30,063	36.0	46,974	25.8	.034	1,211,929	1,597
South West.	2.1	6,038	30.0	8,625	16.1	.06	138,862	517
Totals ...	1.97	77,664	38.1	125,302	20.05	.059	2,512,978	7,409

SUMMARY OF ESTIMATED ORE RESERVES

(at 13 cu. ft. per ton)

Candelaria	3,000	11.5	.075	34,500	225
Colonia	2,200	13.4	.08	29,480	176
Buena Ventura	3,000	11.8	.06	35,400	180
Esperanza	1,000	12.0	.05	12,000	50
Guadalupe	1,000	11.2	.04	11,200	40
Nueva	1,200	11.8	.06	14,160	72
North West	2,200	13.6	.07	29,920	154
Rosario	9,500	12.4	.08	117,800	760
West	2,000	14.0	.05	28,000	100
Jucuara	2,000	12.0	.05	24,000	100
Porvenir	2,000	12.8	.06	25,600	120
Fortuna	2,000	13.6	.07	27,200	140
Totals	31,100	12.5	.068	389,260	2,117

Summary of Estimated Fills

(at 17 cu. ft. per ton)

West	9,000	10.0	.05	90,000	450
Guadalupe	3,000	10.0	.05	30,000	150
Buena Ventura	1,500	10.0	.05	15,000	75
North West	1,000	10.0	.05	10,000	50
Candelaria	3,000	10.0	.05	30,000	150
Rosario	5,000	10.0	.05	50,000	250
Total	22,500	10.0	.05	225,000	1,125

Summary

Calculated Ore	125,302	20.05	.059	2,512,978	7,409
Estimated Ore	31,100	12.50	.068	389,260	2,117
Estimated Fills	22,500	10.00	.050	225,000	1,125
Broken Ore in Stopes	23,672	14.20	.060	336,142	1,420
Totals	202,574	17.09	.059	3,463,380	12,071

Average metal content per ton at mill—Silver..... 17.09 oz.
Gold..... .059 oz.

Annex "B"

DEVELOPMENT FOR YEAR 1921

Veins	Drifts	Raises	Cross-Cuts	Winzes	Totals Feet
South San Miguel	480.5	82.0	15.0	....	577.5
South San Miguel Hilo	244.0	....	....	....	244.0
North San Miguel	....	20.0	....	....	20.0
Culebra	648.5	91.0	103.0	....	842.5
Buena Ventura	258.0	94.5	32.0	....	384.5
Guadalupe	....	30.0	....	....	30.0
Nueva	102.0	....	9.0	....	111.0
North West	76.0	98.5	85.0	20.0	279.5
Candelaria	116.0	30.0	58.0	....	204.0
Carmen	401.0	189.0	234.5	....	824.5
Salvador	1,964.5	441.5	95.5	2.0	2,503.5
Esperanza X-Cut	....	....	300.5	....	300.5
Esperanza X-Cut Stringers	70.5	....	....	....	70.5
West	20.5	....	....	....	20.5
Capitana	11.0	....	14.0	....	25.0
Salvador Shaft	62.5	171.5	2.5	48.5	285.0
Rosario	91.0	....	26.0	....	117.0
Fortuna	64.5	....	....	....	64.5
Totals	4,610.5	1,248.0	975.0	70.5	6,904.0

Annex "C"

VEIN PRODUCTION 1921—DRY TONS

Veins	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
North San Miguel	145	75	99	27	...	...	...	...	...	...	...	1	347
South San Miguel	2,095	1,635	1,972	656	...	...	...	...	...	...	1	27	6,386
South San Miguel Hilo	...	...	...	...	...	...	...	...	...	...	15	29	44
Candelaria	548	409	264	102	...	...	...	...	...	...	...	...	1,323
Colonia	191	197	265	55	...	...	...	...	...	...	...	...	708
Culebra	1,016	1,199	1,712	511	...	...	...	...	...	...	22	87	4,547
Buena Ventura	661	502	360	57	...	...	...	...	...	...	23	65	1,668
Rosario	720	978	1,102	225	...	...	...	...	...	...	...	...	3,025
North West	1,047	538	357	76	...	...	...	...	...	...	2	...	2,020
San Joaquín	1,203	1,271	713	1,773	...	...	...	...	...	...	105	13	5,078
Carmen	495	518	647	428	...	...	...	...	...	...	...	21	2,109
Porvenir	22	40	27	6	...	...	...	...	...	...	...	...	95
Fortuna	52	37	105	34	...	...	...	...	...	...	1	27	256
Salvador	528	477	464	220	...	...	...	...	...	...	12	71	1,772
Nueva	69	40	101	37	...	...	...	...	...	...	...	...	247
Ore from Development	1,044	1,283	1,662	1,024	82	...	12	108	138	135	102	73	5,663
Totals	9,836	9,199	9,850	5,231	82	...	12	108	138	135	283	414	35,288

Annex "D"

FILL PRODUCTION, 1921

Veins	Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Guadalupe	443	310	377	124	...	...	...	...	...	...	...	...	1,254
West	1,481	1,048	874	407	...	...	...	...	...	...	...	...	3,810
North West	74	43	439	267	...	...	...	...	...	...	...	...	823
Nueva	220	281	145	35	...	...	...	...	...	...	...	...	681
Rosario	...	60	228	44	...	...	...	...	...	...	14	65	411
Candelaria	332	417	618	256	...	...	...	...	...	...	...	...	1,623
	2,550	2,159	2,681	1,133	...	...	...	...	...	...	14	65	8,602

Summary

Total Vein production	35,288 tons
Total Fill production	8,602 tons
Grand Total	43,890 tons

ANNEX "E"

NEW YORK & HONDURAS ROSARIO MINING COMPANY
TONNAGE MINED FROM OCTOBER 1ST, 1907, TO JANUARY 1ST, 1922

	ORE FROM VEINS	Oct. 1907 to Jan. 1, 1916	1916 Jan. to Jan.	1917 Jan. to Jan.	1918 Jan. to Jan.	1919 Jan. to Jan.	1920 Jan. to Jan.	1921 Jan. to Jan.	TOTAL	GRAND TOTAL Including Fill	
1	Buena Ventura	13,159	5,134	6,637	9,840	13,862	7,226	1,668	57,526	91,878	1
2	Candelaria	107,240	5,838	7,763	6,952	9,144	9,372	1,323	147,632	153,895	2
3	Capitana	35,755	8,979	4,189	1,090	850	2,082	....	52,945	52,945	3
4	Carmen	....	....	....	....	....	2,746	2,109	4,855	4,855	4
5	Catalina	2,297	50	....	....	....	....	....	2,347	2,347	5
6	Colonia	28,751	8,455	4,273	3,181	2,235	4,156	708	51,759	51,759	6
7	Concepcion	18,461	....	....	133	576	....	....	19,170	19,170	7
8	Culebra	2,949	799	1,846	1,380	6,551	8,702	4,547	26,774	26,774	8
9	Crisanta	165	1,710	3,533	1,193	809	....	....	7,410	7,410	9
10	Esperanza	6,329	1,151	457	332	....	....	....	8,269	8,269	10
11	Fortuna	....	....	....	....	....	527	256	783	783	11
12	Guadalupe	10,805	3,003	1,706	3,664	2,193	614	....	21,985	60,205	12
13	Jucuara	508	1,342	357	....	....	....	....	2,207	2,207	13
14	North	4,006	....	....	....	....	....	....	4,006	4,006	14
15	Northwest	10,361	2,013	1,831	1,359	1,307	6,752	2,020	25,643	63,498	15
16	Nueva	16,047	636	....	....	....	804	247	17,734	27,846	16
17	Porvenir	....	....	....	72	213	579	95	959	959	17
18	Rosario	38,386	11,715	11,315	8,439	11,529	14,810	3,025	99,219	114,943	18
19	San Joaquín	17,592	11,304	8,945	7,606	6,638	4,789	5,078	61,952	61,952	19
20	San Miguel (North)	132,359	10,250	16,625	6,273	5,532	3,402	347	174,788	174,788	20
21	San Miguel (South)	....	....	4,194	16,539	25,911	24,229	6,430	77,303	77,303	21
22	Salvador	....	....	....	....	....	376	1,772	2,148	2,148	22
23	Socorro	5,811	3,258	3,587	3,661	3,493	....	....	19,810	19,810	23
24	Southwest	14,206	4,009	394	152	....	....	....	18,761	18,761	24
25	West	22	1,867	5,400	2,950	1,324	524	....	12,087	89,403	25
26	Ore from Development	4,122	6,471	4,246	7,358	12,117	19,078	5,663	59,055	59,055	26
27	Miscellaneous	715	....	....	....	....	....	....	715	715	27
	Total	470,046	87,984	87,298	82,174	104,284	110,768	35,288	977,842	1,197,684	
	STOPE FILL										
1	Buena Ventura	3,507	7,019	6,255	8,886	5,405	1,657	1,623	34,352	....	1
2	Candelaria	....	....	471	1,246	1,457	3,089	....	6,263	....	2
3	Guadalupe	4,105	8,123	7,937	9,125	3,827	3,849	1,254	38,220	....	3
4	Northwest	2,759	9,402	5,509	8.601	5,947	4,814	823	37,855	....	4
5	Nueva	....	504	2,918	2,210	1,369	2,430	681	10,112	....	5
6	Rosario	5,713	3,092	2,755	3,026	14	713	411	15,724	....	6
7	West	9,745	11,906	12,757	14,632	11,699	12,767	3,810	77,316	....	7
	Total	25,829	40,046	38,602	47,726	29,718	29,319	8,602	219,842	....	
	Grand Total	495,875	128,030	125,900	129,900	134,002	140,087	43,890	1,197,684	1,197,684	

BALANCE SHEET

NEW YORK & HONDURAS ROSARIO MINING COMPANY—NEW YORK CITY

DECEMBER 31, 1921

ASSETS

PERMANENT:			
Mines, Real Estate & Concessions		$3,000,000.00	
Plant, Buildings, Machinery & Equipment	$1,232,054.55		
Less: Allowance for Depreciation	615,162.00	616,892.55	$3,616,892.55
CURRENT:			
Cash		$ 32,458.52	
Call Loans Receivable plus Interest		251,111.09	
Bullion on Hand at Mine, at Market		1,144.54	
Broken Ore in Stopes and Mill Bins at Cost		114,217.38	
Materials and Supplies at Cost		308,464.11	
U. S. Securities at Market, plus Interest		333,432.19	
Foreign Government Bonds at Cost, plus Interest		25,176.37	
Domestic Railroad Bonds at Cost, plus Interest		49,876.50	
Sundry Accounts Receivable		60.49	1,115,941.19
OTHER ASSETS:			
Investments in Stocks of Other Companies		$ 51,853.00	
Advances to Other Companies less Reserve		59,888.13	
Miscellaneous Accounts Receivable		6,571.44	
Claims Receivable		7,016.75	125,329.32
DEFERRED CHARGES:			
Prepaid Insurance, Taxes and Expenses			53,156.39
TOTAL ASSETS			$4,911,319.45

LIABILITIES

CURRENT:			
Drafts Payable	$ 15,409.97		
Accounts Payable	904.23	$ 16,314.20	
Miscellaneous Deposits—Honduras		2,073.00	
Federal Income and Profits Taxes, Prior Years (Estimated)		200,000.00	$ 218,387.20
RESERVES:			
Mine Fire Insurance		$ 27,708.89	
Transit Insurance		2,527.62	
Depletion of Mines		1,056,169.36	1,086,405.87
CAPITAL STOCK:			
Authorized and Issued: 200,000 shares Par Value $10.00 per share		$2,000,000.00	
SURPLUS:			
Appreciation of Mine Valuation Less Depletion	$1,123,198.18		
Earned Surplus	483,328.20	1,606,526.38	3,606,526.38
			$4,911,319.45

INCOME AND PROFIT AND LOSS STATEMENT NEW YORK & HONDURAS ROSARIO MINING COMPANY—NEW YORK CITY

For the Year Ended December 31, 1921

Production of Gold and Silver		$ 466,956.02	
Less: Freight & Expenses on Bullion		22,944.61	
Operating Income			$ 444,011.41
Operating Expenses		$ 344,716.01	
Non-Operating Expenses		182,646.11	527,362.12
Operating Loss			*$ 83,350.71*
New York Administrative Expenses			43,520.55
Net Loss from Operating			*$ 126,871.26*
Other Income			46,305.78
			$ 80,565.48
Other Deductions			30,302.96
Net Loss for Year			*110,868.44*
APPROPRIATED FOR RESERVES:			
Ore Depletion		$ 66,574.17	
Fire and Transit Insurance		6,978.03	73,552.20
Deficit for Year Carried to Surplus			*$ 184,420.64*
SURPLUS:			
Surplus, January 1, 1921		$1,403,204.39	
ADDITIONS:			
Cancelling Reserve for Exchange Fluctuation	$ 129,993.25		
Increasing Value of Liberty Bonds to Market—December 31, 1921	24,898.81		
Adjusting Reserve for Depletion—Prior Years	439,667.43		
Adjustment of Sundry Accounts	3,183.14		
	$ 597,742.63		
DEDUCTIONS:			
Dividends Paid During 1921	60,000.00		
Increasing Reserve for Federal Income & Profits Taxes, Prior Years	150,000.00		
	$ 210,000.00	387,742.63	1,790,947.02
Surplus—December 31, 1921			$1,606,526.38

AUDITOR'S CERTIFICATE

We hereby certify that we examined the books of account and records of the New York & Honduras Rosario Mining Company—New York City, for the year ended December 31, 1921, and subject to the fact that we did not examine the records of the Mine Office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial position of the Company at the date stated and that the relative Income and Profit and Loss Statement is correct.

Very truly yours,

(Signed) ERNST & ERNST.

NEW YORK AND HONDURAS ROSARIO MINING COMPANY
COMPARATIVE STATEMENT OF WORKING CAPITAL

December 31	1913	1914	1915	1916	1917	1918	1919	1920	1921
Cash and Cash Items.....	$106,866	$ 90,618	$112,208	$ 259,459	$ 515,562	$ 684,899	$ 380,965	$ 650,199	$ 692,055
Bullion in Transit.....	207,438	252,348	271,735	353,115	325,260	387,348	805,137	231,770	1,145
Ore in Stopes and Mill Bin...	89,077	96,884	99,951	122,873	121,171	112,125	95,133	120,977	114,217
Inventories and Supplies.....	250,940	272,805	292,731	300,759	427,908	438,427	377,166	403,393	356,716
Accounts Receivable.....	41,805	5,020	1,896	66,497	115,303	62,683	117,876	13,788	18,553
Total Quick Assets*.....	$696,126	$717,675	$778,521	$1,102,703	$1,505,204	$1,685,482	$1,776,277	$1,420,127	$1,182,686
Current Liabilties†.....	91,344	71,138	59,026	257,498	567,783	694,373	522,062	349,069	218,387
Net Working Capital.....	$604,782	$646,537	$719,495	$ 845,205	$ 937,421	$ 991,109	$1,254,215	$1,071,058	$ 964,299
Increase over Preceding Year.	.....	41,755	72,958	125,710	92,216	53,688	263,106	.....	.....
Decrease from Preceding Yr.	.....	.....	.....	.....	.....	.....	.....	183,157	106,759
Increase over Dec., 1913, Working Capital.....	.....	41,755	114,713	240,423	332,639	386,327	649,433	$ 466,276	$ 359,517
Increase in Investments over 1913	.....	38,309	43,781	103,521	134,794	321,015	442,550	330,448	311,805
Additions to Plant, Etc., since 1913	.....	.....	.....	.....	.....	.....	260,758	271,884	316,857
Increase in Assets since 1913‡.	.....	.....	.....	.....	.....	.....	$1,352,741	$1,068,608	$ 988,179

* Embraces all Cash in Banks and Agencies, Accounts and Notes Receivable, Inventories, but does not include Plants, Real Estate, Mining Property, Equipment nor Investments.

† The Liabilities embrace everything except Capital Stock, Surplus and Reserves. In the years 1920 and 1921, $200,000, included to cover additional Federal taxes for the years 1917 to 1921 inclusive.

‡ Excludes increased valuation of mine.

TABLE SHOWING

Bullion Production

1882	$ 2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	763,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
Total	$30,354,754.12

Distributions to Stockholders

1887	No. 1	$ 37,500— 2½%	Dividend
1888	Nos. 2 to 5	60,000— 4%	Dividend
1889	Nos. 6 to 14	150,000—10%	Dividend
1891	Nos. 15 to 16	30,000— 2%	Dividend
1892	Nos. 17 to 21	165,000—11%	Dividend
1893	Nos. 22 to 25	150,000—10%	Dividend
1894	No. 26	37,500— 2½%	Dividend
1896	Nos. 27 to 28	30,000— 2%	Dividend
1897	Nos. 29 to 40	180,000—12%	Dividend
1898	Nos. 41 to 48	120,000— 8%	Dividend
1899	Nos. 49 to 60	180,000—12%	Dividend
1900	Nos. 61 to 75	225,000—15%	Dividend
1901	Nos. 76 to 93	300,000—20%	Dividend
1902	Nos. 94 to 100	105,000— 7%	Dividend
1903	No. 101	15,000— 1%	Dividend
1904	Nos. 102 to 108	105,000— 7%	Dividend
1905	Nos. 109 to 121	180,000—12%	Dividend
1906	Nos. 122 to 139	285,000—19%	Dividend
1907	Nos. 140 to 153	210,000—14%	Dividend
1908	Nos. 154 to 165	180,000—12%	Dividend
1909	Nos. 166 to 173	120,000— 8%	Dividend
1910	Nos. 174 to 180	105,000— 7%	Dividend
1911	Nos. 181 to 182	90,000— 6%	Dividend
1912	Nos. 183 to 184	70,000— 3½%	Dividend
1913	Nos. 185 to 188	180,000— 9%	Dividend
1914	Nos. 189 to 193	240,000—12%	Dividend
1915	Nos. 194 to 197	240,000—12%	Dividend
1916	Nos. 198 to 205	400,000—20%	Dividend
1917	Nos. 206 to 211	300,000—15%	Dividend
1917	No. 1	100,000— 5%	Amortization
1918	Nos. 212 to 215	200,000—10%	Dividend
1918	Nos. 2 to 5	200,000—10%	Amortization
1919	Nos. 216 to 219	200,000—10%	Dividend
1919	Nos. 6 to 9	200,000—10%	Amortization
1920	Nos. 220 to 225	320,000—16%	Dividend
1920	Nos. 10 to 11	80,000— 4%	Amortization
1921	No. 226	60,000— 3%	Dividend
Total		$5,850,000	

Dividends 1 to 182, inclusive, on Capital Stock	$1,500,000.00
Dividends 183 to 226 inclusive, on Capital Stock	2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, on Capital Stock	2,000,000.00

J1413

REPORT *of the*

NEW YORK & HONDURAS ROSARIO MINING CO.

1922

NEW YORK

January 1, 1923

OFFICERS 1923-1924

LEWIS L. CLARKE, *President.*
H. A. GUESS, *Vice-President.*
A. R. GORDON, *Vice-President.*
W. C. LANGLEY, *Treasurer.*
J. PERLMAN, *Secretary.*

BOARD OF DIRECTORS 1923-1924

WM. A. PRENDERGAST, *Chairman.*

SIDNEY ABBEY,
LEWIS L. CLARKE,
H. A. GUESS,
IRVING HEIDELL,
J. C. F. JACOBY,
W. C. LANGLEY,
W. L. SAUNDERS,
E. V. SOTO,
AMBROSE G. TODD,
DR. JULIUS J. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1923-1924

WM. A. PRENDERGAST, *Chairman.*

SIDNEY ABBEY,
H. A. GUESS,
W. L. SAUNDERS,
AMBROSE G. TODD,
P. R. WEILER,
LEWIS L. CLARKE } *Ex-Officio*
W. C. LANGLEY }

Annual Report of the President of the New York and Honduras Rosario Mining Company

New York, January 1, 1923.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.
Gentlemen:

The business of this Company proceeded most satisfactorily during the year 1922, *with the single interruption of a strike at the mine commencing the latter part of May and lasting five weeks. Since the return of the workers on July* 1*st, the Company's relations with them have been of a most amicable nature.*

It is a great pleasure to set forth the following salient and gratifying facts, shown as a result of the work of 1922:

Ore Reserves at January 1, 1923	196,016	Tons
Ounces per Ton:		
Silver	17.35	
Gold	.054	
Or a total of	3,399,991	Ounces Silver
And	10,531	Ounces Gold
Development	4,887.5	Feet
Ore Production	68,763	Tons
Dry Tons Treated	69,470	Tons
Ounces Silver Produced	1,449,899	
Ounces Gold Produced	4,357	
Bars of Doré Bullion	928	
Average Tons Milled per day (365 Days)	190	
Average Silver Recovery, per cent.	88.84	
Average Gold Recovery, per cent.	91.79	
Average Ounces Silver Recovered per Ton	20.851	
Average Ounces Gold Recovered per Ton	.0627	
Value per Ounce of Silver Sold	$.6735	
Value Silver Recovered per Ton	$14.0302	
Cost of Silver Recovered per Ton	$ 8.9005	
Cost of Silver Recovered per Ounce	$ .4273	
Net Profit on Silver Recovered per Ton	$ 5.1297	
Net Profit on Silver Recovered per Ounce	$ .2462	

The Operating Income for the year was	$1,025,595.01
Less: Operating Expenses	621,409.83
Operating Profit	$404,185.18
Less: N. Y. Administrative Expenses	47,826.60
Net Profit from Operations	$356,358.58
Miscellaneous Income, less charges	32,201.64
Net Profit for Year	$388,560.22
Less: Appropriated for Reserves	162,827.59
Applicable to the Payment of Dividends or to Surplus	$225,732.63

Materials and Supplies on hand and in transit $191,771.69, *which is approximately* $60,000.00 *less than the Inventory of* 1913, *the next smallest in the last ten years.*

Current Assets December 31, 1922 *were*.....$1,298,543.95, *or an increase over the preceding year of* $182,602.76. *These are as follows:*

Cash	$ 73,454.88
Loans Receivable, plus Interest	234,968.73
Bullion at Smelters and in Transit, at Market	142,270.90
Broken Ore in Stopes and Mill Bins, at Cost	91,467.00
Materials and Supplies, at Cost	191,771.69
U. S. Liberty Bonds, at Market, plus Interest	207,835.48
Greenville County, S. C. Bonds, at Cost, plus Interest	103,819.45
Foreign Government Bonds, at Cost, plus Interest	75,910.08
Domestic R. R. Bonds, at Cost, plus Interest	73,212.71
Domestic Industrial Bonds, at Cost, plus Interest	103,833.03
	$1,298,543.95

There was appropriated for Reserves:	
Mine Fire Insurance	$ 5,295.88
Transit Fire Insurance	2,632.32
Ore Depletion	138,559.25
For Interest on Advances to Sabana Grande Honduras Mining Company	16,340.14
	$162,827.59

Current Liabilities $218,304.86
or a decrease of $82.34. *These liabilities include* $123,296.48 *to cover Federal Income and Profits Taxes for the period* 1917-1920 *inclusive.*

The ratio of Current Assets to Current Liabilities is 5.95 *or approximately* 6 *to* 1.

After paying dividends amounting to $150,000.00, *and providing for all necessary reserves, there was added to Surplus the sum of* ..... $90,314.52.

San Marcos Mine at Sabana Grande

This property has not been operated for two years. During 1922 *the Mill has been rebuilt and it is intended to resume operation the early part of* 1923.

Expansion

A number of properties have been investigated, but none favorably considered. The quest for acceptable properties will be continued.

Government of Honduras

During the past year the Company had the honor of a visit at its property of His Excellency, President Rafael Lopez Gutierrez, to whom it extends its sincere thanks for many courtesies.

Audit

The books of the Company have been audited by Messrs. Ernst and Ernst.

Respectfully submitted,
LEWIS L. CLARKE,
President.

Annual Report of the General Manager

San Juancito, Honduras, January 1, 1923.

To the President:

New York & Honduras Rosario Mining Co.,
New York City.

Dear Sir:

We take pleasure in submitting to you the following report covering operations at this Company's properties in Honduras during the fiscal and calendar year 1922. Comparison is made with the year 1920 instead of 1921, as during the latter year operations were suspended eight months.

PRODUCTION

	1922	1921	1920
Dry tons treated	69,470	43,920	140,100
Ounces silver produced...	1,444,899	657,250	1,711,349
Ounces gold produced....	4,357	3,325	8,001
Ratio of silver to gold ..	333	200	214
Bars Doré Bullion.....	928	415	1,097
Bullion fineness, gold....	2.89	4.93	4.53
Bullion fineness, silver...	963.20	973.92	968.44
Average contents per ton Ore delivered to mill:			
Ounces silver	23.494	17.17	14.19
Ounces gold	.0684	.081	.0604

All bullion produced was consigned to the Treasurer of the Company in New York.

Owing to the virtual exhaustion of veins of pronounced gold content, the 1922 proportion of gold to silver produced was as 1 to 333, or the lowest on record. As the above comparative statement shows, the proportion was considerably higher in the two preceding years. As late as 1917 it was as high as 1 to 121.

Until new sources of gold are found this must continue to be a small factor in future bullion production.

OPERATING CONDITIONS DURING 1922

Operations were suspended in April, 1921, with the price of silver at about 60c per ounce. They were resumed on January 1, 1922, or eight months later, with silver at but 65c per ounce. That resumption was made possible at a silver price only 5c above that at the time of suspension and in face of the certainty that less gold would be obtained with each ounce of silver produced than at any time before in the history of the Company, was due to the fact that the eight months of entire suspension permitted a thorough readjustment to a more economical basis

in the items of supervision, labor, supplies and working methods in all departments and also the making of much needed repairs and replacements to equipment.

The following is a brief description of changes made in working methods which have direct bearing upon compensation of labor and the purchase of local supplies.

Mine Department

A fixed daily wage has been the custom for many years on this property for which a certain amount of work or "task" was expected. It was noted, particularly in underground operations, where from 850 to 900 men were employed, that in some of these operations considerable speeding up on the part of the men was possible. But dollar silver, and a shortage of labor increasingly felt, due to the continuous call for hands by large agricultural developments on the North Coast of the Country, made any contemplated demand for more work, without at the same time a general increase in wages, unwise.

The principal change introduced so far as compensation of labor is concerned was the substitution wherever possible of the "piece work" method, whereby a man's skill and industry are exactly reflected in his pay envelope.

Instead of drilling a stipulated footage on day's pay as formerly, the machine runners in the stopes now get paid on a basis of per foot of hole drilled. This permits a good man to earn better wages than he formerly could while the poor man is eventually eliminated or seeks employment in other classes of work for which he is better fitted. With a man's earnings a direct measure of his work, it is now easier for the Company to select the best men for more important tasks, and to the advantage of both.

As with the machine miners, the "piece work" method was applied to the car men who tram the ore and the waste, already partly on this basis before the shut down, and where the pay is so much per car handled.

In the matter of development work, changes in the system of giving out contracts for this have been largely instrumental in lowering considerably the cost per foot of advance made in all cases.

The night shift has been abolished and, as a consequence, a saving effected in several directions. Living conditions were such that most of our men could not get all the rest during the day that they should; consequently this was reflected in their work. While in the future some night work underground may become necessary, it will be kept at a minimum. Sunday work

underground has also been abolished, excepting on the two electric haulage systems where, in all, not more than fourteen men are involved. It has been found that with Sunday work in force the men, on the whole, lay off at other times to make up for it.

A minority of the mine men did not take kindly to all these changes and, coupled with work of agitators from the outside, a strike for pre-shut down conditions was declared in June, which lasted three weeks and caused the Mill to be idle about twice that time. The Company stood firm in its new policy. It could do nothing else, as reversion to former methods would have meant operation without profit, or even at a loss.

Experience in the past year has shown that wherever "piece work" is possible it should by all means be introduced. It creates incentive, decreases expensive supervision in some operations and automatically eliminates the inefficient and the idlers. Owing largely to the last two points and also that some of the men who left camp when operations were suspended did not return, the mine force in the past year averaged 332 men per day as against about 900 before the shut down.

With a force reduced to a little over one-third we were confronted with the problem of producing considerably higher grade ore to conform to the lower price of silver, the carrying out of a strong development program and keeping up current repairs. Mining conditions averaged decidedly less favorable than in 1920. The ore mined came mostly from hard rock veins with a smaller tonnage yield per foot of hole drilled and pound of explosives consumed, and development averaged in harder ground than ever before. The amount of cheaply mined stope fill, which was the mainstay in producing the large monthly milling tonnages in the past, had to be reduced, on account of its grade, by nearly 75%. Ore from development excavations, another important factor in the making up of the milling tonnage, was, also on account of its grade, the lowest since 1917.

The following comparative figures in this regard are impressive:

	1920	1922	Difference
Ore from Development Excavations, tons...	19,078	4,544	14,534
Stope Filling, tons	29,319	8,061	21,258
Total difference against 1922, tons			35,792

Milling Department

Improvements and repairs effected during suspension of operations permitted a decrease in the mill crew from 83 to 54 men per twenty-four hours. Some of the twelve hour shifts were

shortened to eight and to ten hours, with the result that better service was obtained.

In another part of this report we described in detail repairs and improvements in the Mill.

Other Operating Departments

The Mechanical and the Surface Departments were combined, thus decreasing overhead very considerably. The maintenance of a foreman and several men in the town of San Juancito for the purpose of looking after some of the flume lines and other work was done away with altogether. The work there is now taken care of between the Electrical and the Surface Departments just as effectively and at decidedly lower cost.

The force of men at the dams and penstocks has been cut in half. Reductions in the number of men were made in the stables, the garden, on road maintenance, in warehouses, in the laboratory.

Native Commissariat

To control the cost of the most necessary articles of food, such as corn, beans, rice, etc., a commissariat was established in San Juancito, where these articles can be purchased by all employees at cost. This commissariat has proved most effective and beneficial.

Local Supplies

In the matter of local supplies, the prices of which were all on the increase before operations were suspended, important reductions were made, as follows:

Lime—From $0.24 to $0.23 per arroba (25 lbs.)
Charcoal—From $2.00 to $1.75 per box.
Pine Logs, squared—From $0.02¼ to $0.01½ per board foot.
Mine timber per log, average, 25% decrease.

Working Capital

At the end of 1920 our total working capital, as per Honduras books, was $511,686. At the end of 1922, and without in any way affecting efficiency of operations, it stood at $273,370, showing a decrease of $238,316 or 46%. This is due mainly to more favorable banking arrangements in Honduras, which obviate the necessity of a large cash reserve, decrease in general supplies stocks and in smaller commissariat inventories.

Exchange

To provide funds to carry on operations during 1922 we sold $324,751 in drafts on the Treasurer which yielded 679,423 pesos.

The prescribed rate of exchange in the Country is two pesos for one United States dollar. But in 1922 the average yield per dollar sold was a fraction over 2.09 pesos. On this basis exchange earnings amounted to $14,961.

Administration Department

Under this general heading are embraced all Honduras items of expense outside those included in the Mine and Mill Departments.

Each item shown in the following comparative statement was carefully considered from the standpoint of practical economy, with the result that the net decrease, as compared with 1920, is $53,398.

Comparative Cost Statement

	1922	1920	Decrease	Increase
Administration	$10,236.00	$21,948.00	$11,712.00	
Roads	1,341.00	5,157.00	3,816.00	
Lighting	1,273.00	565.00		$708.00
Repairs to buildings	4,094.00	5,716.00	1,622.00	
Telephones	1,609.00	1,995.00	386.00	
Police and watchmen	10,728.00	15,351.00	4,623.00	
Pensions and charities	3,961.00	7,230.00	3,269.00	
Schools	5,900.00	6,732.00	832.00	
Agency expense	3,905.00	8,193.00	4,288.00	
Taxes	4,045.00	4,127.00	82.00	
Office expense	14,325.00	19,344.00	5,019.00	
Medical expense	6,074.00	6,900.00	826.00	
Couriers and trips	1,616.00	3,019.00	1,403.00	
Cables and telegrams	1,254.00	1,489.00	235.00	
Legal expense	178.00	1,841.00	1,663.00	
Postage	85.00	209.00	124.00	
Stables	5,091.00	8,097.00	3,006.00	
Surface work	6,432.00	10,793.00	4,361.00	
Warehouse expense	3,121.00	5,508.00	2,387.00	
Contributions and subs	1,576.00	2,030.00	454.00	
Newspapers and periodicals	78.00	77.00		1.00
Coin freight	321.00	537.00	216.00	
Cantarranas water line	927.00	3,299.00	2,372.00	
Water and fire system	164.00	1,034.00	870.00	
Saw mill maintenance	451.00	2,288.00	1,837.00	
Insurance	4,713.00	950.00		3,763.00
Tegucigalpa roads	754.00			754.00
Auto maintenance	389.00	758.00	369.00	
Examination of prospects	9.00	183.00	174.00	
Breakage and leakage	104.00	2,782.00	2,678.00	
Totals	$94,754.00	$148,152.00	$58,624.00	$5,226.00
Net decrease	$53,398.00			
Total cost per ton	$1.36	$1.06		
Total cost per fine ounce bullion produced	.0652	.0862		

Tons milled	69,470	140,100
Ounces silver produced	1,449,899	1,711,349
Ounces gold produced	4,357	8,001

HONDURAS OPERATING COSTS

In the consideration of costs during 1922, comparison is made with 1920, the last year of continuous operations prior to their suspension for eight months in 1921.

The comparative cost figures shown cover Honduras operations only and do not include depreciation, taxes, some deferred charges, the cost of shipment, insurance and marketing of bullion, and the New York Office administration expense.

Basis	1922	1920
Dry tons milled	69,470	140,100
Troy ounces silver produced	1,449,899	1,711,349
Troy ounces gold produced	4,357	8,001

	Total Costs		Per Ton		Per Troy Ounce Fine Bullion	
	1922	1920	1922	1920	1922	1920
Mine						
Labor	$135,947.00	$407,165.00	$1.96	$2.91	$.0935	$.2368
Supplies	90,076.00	192,694.00	1.30	1.37	.0619	.1121
Power	5,547.00	7,757.00	.08	.06	.0038	.0045
Total	$231,570.00	$607,616.00	$3.34	$4.34	$.1592	$.3534
Mill						
Labor	$38,055.00	$62,031.00	$ .55	$ .44	$.0261	$.0361
Supplies	162,583.00	250,746.00	2.34	1.79	.1118	.1458
Power	8,675.00	13,577.00	.12	.10	.0060	.0079
Total	$209.313.00	$326,354.00	$3.01	$2.33	$.1439	$.1898
Honduras Administration	94,754.00	148,152.00	1.36	1.06	.0652	.0862
Totals	$535,637.00	$1,082,122.00	$7.71	$7.73	$.3683	$.6294
Less value of Gold produced	87,140.00	160,020.00	1.25	1.14	.0599	.0931
Net costs	$448,497.00	$922,102.00	$6.46	$6.59	$.3084	$.5363
Cost per Troy ounce silver produced	$.3093	$.5388				

THE MINE

Ore Reserves

The ore reserves as of January 1, 1923, shown in detail in Annex "A," when compared with those of January 1, 1922, are less by 63,389 ounces silver and 1,540 ounces gold. Considering that 1,632,128 ounces silver and 4,752 ounces gold were mined during 1922, it is evident that the 4,887.5 feet of development work in 1922 responded favorably.

Summary

	Tons of Ore and Waste	Oz. Ag. Per Ton	Oz. Au. Per Ton	Total Oz. Ag.	Total Oz. Au.
Calculated ore, at 13 cu. ft....	133,890	19.23	.050	2,575,358	6,679
Estimated ore, at 13 cu. ft.....	29,500	12.35	.073	364,300	2,145
Estimated fills, at 17 cu. ft....	13,500	10.00	.049	135,000	655
Broken ore in stopes, at 21 cu. ft.	19,126	17.01	.055	325,333	1,052
Totals	196,016	17.35	.054	3,399,991	10,531
Average metal content per ton at mill:		Silver, 17.35 oz. Gold, .054 oz.			

A mining width of 3 ft. and 4 ft. is assumed on the more uniform ore bodies, such as those of the Salvador, Southwest and Fortuna veins, and the difference between such width and that of the respective vein is the waste broken with the ore, represented by the percentage shown. In other veins the same mining width is assumed but the waste percentage has been reduced because it will be possible to remove a portion of this before ore deliveries to the Mill.

Annex "A" is supplemented by maps replete with all necessary detail, and the calculated reserve blocks are shown thereon. The estimated reserves are distributed mostly over veins which were large producers in the past and represent scattered bunches of low grade ore all of which, owing to cheap mining and hauling, can be worked at a small profit. The same holds true for the estimated stope filling still more cheaply mined. Ore broken and stored in stopes is shown in Annex "B."

The average of the total reserves, 17.35 oz. silver and .054 oz. gold, is very nearly the same as last year, the tonnage included being that showing a profit based on a milling rate of about 9,000 tons per month, 90% silver recovery and silver price of 67c U. S. Cy. per ounce. Owing to the large number of veins and the very great variation of the per ton value in these, it is possible to mine almost any grade ore desired. But conditions are such that the higher the grade the lower the tonnage it is possible to produce, so, in planning monthly production programs it is necessary so to combine the items of grade, tonnage, price of silver, amount of labor available and the cost of supplies as to give the best results. Therefore in the past year a grade of 23.49 oz. silver and .068 oz. gold was maintained, but in the coming year the intention is to lower the grade and correspondingly increase the tonnage, as this will have the tendency to prolong the life of the mine.

DEVELOPMENT

The Detail of Development done in each vein during 1922, of which the following is a summary, will be found in Annex "C." In this comparison is made with the years 1920 and 1921.

Comparative Summary

Year	Drifts	Cross Cuts	Raises	Winzes	Total Feet
1920	10,459.5	1,431.5	4,884.5	62.5	16,838.0
1921	4,610.5	975.0	1,248.0	70.5	6,904.0
1922	3,305.0	726.5	765.0	91.0	4,887.5

The 4887.5 feet of development work, while very considerably less than in 1920, was in conformity with 1922 operating conditions. It was quite successful, having disclosed, as already stated, ore of metal content about equal to that mined in 1921.

Almost exactly half, or 2447 feet, of the 1922 development was in the Salvador vein. As opportunity for further development of this vein is still ample, it is probable that in 1923 its development footage will be as great as if not greater than it was in 1922.

The possibility of unfavorable reaction of the Silver Market upon fulfillment of the Pittman Act has already caused us to look into the question of resuming work in some of the gold bearing sections of the Mine. While no new veins are expected, there are odds and ends of gold-silver ore in such old producers as the Capitana, San Joaquin, Colonia and Candelaria veins, which may yield a profit. Therefore some preparatory development work will be done in the coming year.

As opportunities for development in some sections of the Mine are still ample, the aim in 1923 will be to make a bigger total footage than in the year past. The amount of underground labor available will be largely a controlling factor in the extent to which this program can be carried out.

ORE PRODUCTION

Annex "D" shows the monthly tonnage of ore and fill produced by each vein worked in 1922, and Annex "E" the total tonnage production of all veins since October 1, 1907. Prior to this date no records exist.

COMPARATIVE SUMMARY

	1922 Tons	1921 (4 Months) Tons	1920 Tons
Ore obtained by stoping	56,158	29,625	91,690
Ore from development excavations.	4,544	5,663	19,078
Stope filling	8,061	8,602	29,319
Total delivered to the mill	68,763	43,890	140,087
Percentage stope filling mined	11.7	19.6	20.9
Number of producing veins	14	17	17

Compared with the year 1920 and four months of 1921, the ore produced in the past year, 1922, was obtained under decidedly less favorable conditions. First—The ground stoped averaged harder, therefore required more drilling and explosives: Second—Owing to the low silver market and exhaustion of easily mined stope fill, only 8,061 tons of this material, requiring no drilling or explosives, was obtained: and Third—Ore from vein development excavations, such as drifts and raises, which helps very considerably in making up the daily ore production, was, also owing to the low silver market, exceedingly small.

In the coming year we anticipate somewhat more favorable working conditions. We expect to increase the tonnage and drop the grade of the ore proportionately, provided the price of silver does not go below 67c. This will enable us to work poorer sections of the Mine where, owing to softer ground, a greater amount of ore can be obtained at no greater cost.

It is also planned to decrease the diameter of the holes drilled throughout the mine to see if the smaller amount of explosives thus used per hole will not yield about the same tonnage as at present.

Mine Operating Costs

Your attention is called to the following comparative statement of costs in this department. The 1922 figures reflect the economies effected, as explained in other parts of this report.

Basis	1922	1920
Dry tons milled	69,470	140,100
Troy ounces silver produced	1,449,899	1,711,349
Troy ounces gold produced	4,357	8,001

	Total Costs		Per Ton		Per Troy Ounce Fine Bullion	
	1922	1920	1922	1920	1922	1920
Labor	$135,947.00	$407,165.00	$1.96	$2.91	$.0935	$.2368
Supplies	90,076.00	192,694.00	1.30	1.37	.0619	.1121
Power	5,547.00	7,757.00	.08	.06	.0038	.0045
Total	$231,570.00	$607,616.00	$3.34	$4.34	$.1592	$.3534

VEINS WORKED

In the following a brief description is given of conditions in each vein worked during the year.

The relative position of each vein, its width, assay value, present lateral and vertical extent, is drawn in plan, and vertical section on the maps submitted with this report.

Salvador Vein

Development in this vein consisted of 2447 feet, which represents half the total development done in the mine during the year. A new level, the upper 350, was started at two points,

one in the northern, the other in the southern section of the vein. While but little work has been done so far at this level, the indications are that important ore bodies will be found. The upper 150 level shaft has been sunk to a depth of 110 feet and in the coming year the vein will be developed at this depth by the zero level. If the Salvador vein acts as have most of the other veins in this Mine, the ore at the zero level should average lower in value and occur in smaller bodies.

The distance between the present north and south headings at the upper 150 level is 2100 feet, of which 75% can be considered ore between 1 foot and 1.5 feet in width. Some of this is now being stoped. At the upper 250 level, where the distance driven is not as great as at the upper 150, we have, more or less, a duplication of the upper 150 ore conditions. Development in the past year has also indicated that in some sections there is a double vein with tendencies to greater divergence between the two at the upper levels.

The development program for the coming year, besides embracing continuance of work at the upper 150, upper 250 and upper 350 levels, includes also the intersection of the vein at a new level, the upper 450, one-hundred feet above the upper 350, and opening it up at the zero level.

The Salvador Vein, discovered in May, 1920, is coming up to all expectations and hopes, as expressed in previous reports, as its very substantial ore reserve of 58,626 tons containing 1,324,948 oz. Ag and 1,759 oz. Au indicates. Its production in the past year was 11,765 tons and since discovery 13,913 tons. It is expected that in the coming year its output will be materially increased.

Carmen Vein

Proximity of the Carmen vein to the Salvador, in which intensive development was in progress, prevented as much work in the Carmen as was planned. The 234 feet driven were mostly at the upper 450 level. A small body of ore between six inches and one foot in width was found whose vertical extent has as yet not been determined. One of the characteristics of the Carmen is that, while the ore occurrence is much more bunchy and narrower than that of its neighbor, the Salvador, it is of better grade. The ore found in the 450 level is about equal in per-ton value to that at the lower levels, indicating that ore limits in vertical extent have as yet not been reached. As at the upper 450 the distance between the Carmen and the Salvador is not more than fifty feet, the existence of good trade ore at this point

in the Carmen leads to the hope that equal conditions may be found in the Salvador.

If it is possible to do so, the intention in the coming year is to drive south on the Carmen at the upper 450 level to reach the junction with the Salvador vein, less than two hundred feet distant; also to drive a one hundred foot raise from the upper 450 level to develop the vertical extent of the ore already found on this level. As the Carmen and Salvador veins approach each other in their vertical extent, it is probable that this raise will intersect the Salvador vein. If such is the case, a new level will be started on this intersection.

At the upper 150 level the junction between the Carmen and Salvador veins has been reached. It is very poorly defined and no ore was encountered. Efforts will also be made to drive the upper 150 north heading, as we believe the prospects in this direction to be fair.

Production consisted of 4140 tons of what probably was the best grade ore of the entire mine. The reserves stand at 10,691 tons, averaging 20.5 ounces silver and .045 ounces gold.

Fortuna Vein.

The 198.5 feet of development was at the upper 250 level but disclosed no ore. Stoping in the past year, which amounted to 2875 tons, opened up territory from which an important part of the 8909 tons of ore in reserve will be obtained.

This vein still has ore possibilities and they lie mostly above the upper 250 and below the upper 150 levels. Some development to the north on the branch vein left in the hanging wall is advisable. The plan in the coming year is to open up this vein at the upper 350 level, off the Salvador. No work is contemplated at the zero level until the Salvador vein is fully developed at this point.

South San Miguel Vein.

The total output from this vein and its stringer was 10,050 tons. Development amounted to 568 feet.

Owing to dangerous ground and failure of some of the timbering, all operations above the upper 150 level were suspended in the latter part of the year.

As this vein has a very substantial ore reserve, the plan is to work it through new openings, near the present south headings, by means of a cross cut and raises from the upper 150 level and thus avoid passage through most of the bad ground in the northern section of the vein.

At the zero level the ore, while not as good as at the higher

levels, shows promise of improving as stoping advances to the upper 150. In the coming year most of the ore mined will come from this section of the vein. The upper 700, where small bunches of ore exists, indicates that this elevation is about the limit of profitable ore, so development above the upper 700 will be limited. There are still possibilities for ore ahead of some of the present south headings and, as soon as opportunity offers, work will be started in one of these.

The ore of this vein, averaging between 1 foot and 1.5 feet in width, is of good grade and will assay well over 25 oz. silver before mining. But the ground is loose and the vein irregular, with great tendency to split into two or more stringers, all of which entails more expensive mining than in the other veins, a smaller tonnage output per man and difficulty in producing fairly clean ore.

Culebra Vein.

The Culebra vein, which supplied 12,711 tons of ore in the past year, was the largest single producer. Development consisted of only 489.5 feet and more of this was not possible, due to stoping operations. It is expected that the ore output in the coming year will be equally as great.

Future ore possibilities, in a limited sense, are still good south of the present headings and between the upper 250 and upper 700 levels. It is not possible to do extensive stoping and development at the same time in this vein, so only such development is contemplated as will not interfere with stoping.

The Culebra Vein lends itself to somewhat cheaper mining than is the case with some of the other veins. Due to this it is possible to stope lower grade ore. The average width is about 1.5 feet but occasionally pockets five feet or more in width are encountered. A persistent quantity of waste occurs in the center of the vein in many sections. Owing to this, it is frequently not possible to mine very clean ore.

Candelaria Vein.

Development consisted of only five feet, but considerable work was done to keep the workings open against the time when mining of profitable stope filling would be advisable. Before much of this filling can be obtained, considerable preparatory work is needed and it is expected that in the coming year this will be started.

In such an extensively worked vein as the Candelaria there are always good chances of obtaining small bunches of ore.

While to mine these alone would not pay, in conjunction with the mining of stope filling they should yield a good profit.

The territory above the upper 500 level warrants some development, particularly between blocks 45 and 36. While no rich strikes are expected, the possibilities for a moderate tonnage of medium grade ore are fair.

The Candelaria vein carries a proportion of gold much above the average and it is expected that, when its stope filling and ore pillars are mined at a good rate, a moderate increase in gold in the mill heads will occur.

Rosario Vein.

Though the Rosario vein has been continually worked for over sixty years and its lateral and vertical limits have therefore long been determined, its workings are so extensive that it has always been possible to find some ore in them. The past year was no exception, as 6,828 tons of ore and 3,210 tons of stope filling were mined, which yielded a fair profit. The 333 feet of development was done better to open up the ore stoped in the past year and that in reserve.

In the coming year old workings at the lower 300 level in blocks 9 to 26, at the lower 100 in blocks 32 and 43 and at the zero in blocks 32 and 33 will be opened up and the ore and stope filling mined.

Buena Ventura Vein.

The 2845 tons of ore mined came mostly from the lower 300 level in the vicinity of the Rosario vein junction in blocks 45 to 46. It is questionable if much profit was obtained from this ore if the cost of preparing it for stoping is taken into consideration. As this vein has been worked for many years, the possibilities for large ore bodies have been exhausted. But small ore pillars, anywhere from six inches to two feet in width, still exist at almost all the levels and it would pay to remove some of these at times when other work is in progress in their vicinity.

North-West Vein.

As in the Buena Ventura, the ore mined in the past year came from the old workings. The North-West was worked very extensively in the past when it was the source of the principal tonnage of very high grade ore. There is a section of this vein, between six inches and fourteen inches in width, at and above the upper 150 level, between blocks 43 and 48, which merits attention, and one of the plans for the coming year is to do some stoping and development here.

Several pillars of ore exist at nearly all the levels, some of which it will pay to remove whenever other work is being done in their vicinity.

San Joaquin Vein.

No development was done and only 444 tons of ore obtained from this vein in the past year.

As this vein is rather isolated from the sections of the mine now being worked and the limited amount of labor makes concentration of work in the smallest territory possible most advisable, no development or much stoping is planned for the coming year.

The reserve of 6449 tons is distributed over nearly all the levels and will be stoped in conjunction with other work in that section of the mine.

The San Joaquin, like the Candelaria, carries a proportion of gold much above the present average.

West Vein.

While no development was done in the past year, the West vein produced 560 tons of ore and 4095 tons of stope filling.

The vertical and eastern limits of this vein were reached many years ago. Heretofore the western ore limits have been considered the junction with the Catalina vein, as the many feet of drifting west of this junction, on several levels, while disclosing a strong vein, proved this to be valueless.

However, as territory to the west on this vein is very extensive and not explored, the plan outlined many years ago to develop in that direction will be started in the coming year if possible.

Veins Not Worked in During 1922.

Readjustment of working conditions and lack of efficient labor dictated concentration of mining work within smaller territory. For this reason veins situated any distance away from that territory were not touched during the year, though each has a moderate amount of ore in reserve, as well as some future prospects.

Such veins are the Colonia, Capitana, North, Guadalupe, North-San Miguel and Concepcion, Socorro, Crisanta, Jucuara, Porvenir, Nueva and South-West.

In the coming year some development and perhaps stoping is contemplated in the Colonia at the lower 500 level and in the South-West below the zero level.

Cross Cuts

Esperanza Cross Cut.

The Esperanza cross cut was advanced 340 feet during the year. Several two to three inch stringers were intersected but no work has as yet been done on these.

One hundred feet of drifting was done in the vein cut in 1920 and located about 270 feet west of the Salvador, but, as no encouraging results were obtained, work was stopped.

The character of the rock the Esperanza cross cut is penetrating continues to be the same as that in which the Carmen, Fortuna and Salvador veins exist. So long as this is true, the chances for encountering new veins are good; therefore driving this cross cut will continue in the coming year.

Upper 150 *Level—Thermopilas Cross Cut.*

The object of this cross cut is to intersect the Thermopilas vein which was worked at the surface very many years ago, in a small way, by native prospectors. The distance to be driven is about 400 feet and this work will be started in the coming year.

FUTURE DEVELOPMENT

Distinct from development outlined in veins already discovered and in production, is development in territory where possibilities exist for new veins or extension of those already found.

The Esperanza cross cut, in its 12th year of driving, and already discoverer of the Esperanza, Porvenir, Carmen, Fortuna and Salvador veins, is headed into territory which is still very extensive. The rock continues to be the same as that in which the veins mentioned occur and, so long as this is true, driving of this cross cut must continue to have first attention.

The present object of the upper 150 Thermopilas cross cut is to intersect the Thermopilas vein. Irrespective of the outcome of this particular work, it is advisable to continue this cross cut for some distance, as the territory it would enter, though of no great extent, holds out some chances for veins.

A number of years ago a cross cut was started at the upper 150 level in a northerly direction in block 45, its object being to intersect any branch veins which might exist between the Buena Ventura, Rosario, Guadalupe and Candelaria veins. As this work was never concluded, it is proposed to resume it at an early date.

The Jucuara vein still has fair prospects, though development at the upper 150 level, beyond the stopes, has not been

productive. But there is a possibility that less disturbed ground will be encountered as the contact between the stratified rock in the Clarke tunnel and that in which the vein occurs is left behind. In undisturbed ground the chances for continuance of the vein would be fair, so some work to determine actual conditions should be done. Work above the upper 150 level is also advisable.

When the South-West vein was stoped the existence of a stringer at right angles and in the foot wall was noted at nearly all the levels. It would be advisable to do some work on this stringer, particularly as it might be the continuation of one of the veins in the Esperanza district.

The territory to the west should be explored through the West vein and at the upper 150 level.

The advisability of driving a long exploratory cross cut from the surface, at more or less the same elevation as the upper 150 level, and headed for a point a little south of the Peña Blanca peak, should be carefully looked into. The surface in the vicinity of this peak has been gone over several times, but no veins or stringers of any importance were found. However, the dense tropical growth makes surface prospecting almost futile and it is also suspected that if any veins exist, particularly near the top, they may be covered over by a capping of volcanic tuff. Due to this, instead of spending much money for surface work, it would be better to devote it to the driving of the cross cut, as this would be necessary even if something of value was found by surface work.

Surface croppings of strong veins exist on the Western slope of the mountain, west, southwest and northwest of the principal mine workings. It is advisable to determine if some of these veins are extensions of veins already discovered in the mine workings. If they are not, then a moderate amount of surface work is recommended and later their penetration at depth from the principal mine workings.

MINE EQUIPMENT

Air Compressors.

Owing to discontinuance of the night shift and concentration of all machine work, pumping and hoisting on the day shift, the output of the two Ingersoll-Rand air compressors, each of 2120 cubic feet per minute capacity, was found inadequate at times. It would be advisable to purchase an additional compressor of about 1200 cubic feet capacity, but at the present time this is not recommended.

These two compressors, installed in 1909, and in 1915 equipped with larger cylinders, have proved most satisfactory in

every respect and from every standpoint. They receive the best of care and should last for quite a number of years to come.

Underground Pipe Lines.

It was not found possible to do much toward replacing defective compressed air piping. The difficulty is largely with the 10 inch pipe nearly 3,000 feet in length and with the many thousands of feet of 2 inch and 3 inch pipe. It is exceedingly difficult to get labor understanding pipe repair work, but nevertheless we believe that in the past year air leaks were kept down to those in the average mine.

Rock Drills.

The present drilling equipment, while in fair condition, will soon reach a point when it will be cheaper to order new drills. The question of adopting a later type of stoping drill, lighter and boring a hole of smaller diameter, was mentioned in the 1920 report. In the latter part of 1922 six stope drills of that type were purchased and if successful they will be adopted.

Track and Cars.

Here, too, it was not possible to do as much work as called for to keep this equipment in the best of shape and the cause is due, mostly, to the lack of intelligent labor. As in the case of the piping, this equipment is old and needs replacing at many levels. In the coming year the intention is to order new cars the dimensions of which will be adopted as a standard for the entire Mine and thus avoid in the future one of the present difficulties in dealing with various sizes of cars, the parts of none of which are interchangeable.

Lower 650 Level Electric Haulage.

The lower 650 level is equipped with one General Electric six-ton and two Westinghouse seven-ton electric trolley locomotives. The trackage is about 12,000 feet, 24″ gauge 35-lb. rails. The car equipment consists of 55 doorless rotary dump cars of local design, each of 1¼ tons capacity.

The locomotives are in good condition and will serve many years to come. On the other hand, the motor of the motor-generator set supplying the 250 volt direct current has, after more than nineteen years' continuous and very severe service, commenced to break down. If it is not possible to make lasting repairs, either a new motor or perhaps a new, larger and more modern motor-generator set will be ordered.

The car bodies are badly worn and patched in many places.

However, with the electric welder it will be possible to keep on with the patching work and thus get one or two more years' service from these cars.

The track had more attention than for some time past and is in fair condition.

Peña Blanca, or Upper 150 *Level Electric Haulage.*

The electric haulage equipment at this level consists of one six-ton General Electric and two five-ton Westinghouse locomotives. The trackage is about 25,000 feet 24″ gauge 35-lb. rails. The car equipment is a duplicate of that at the lower 650 level and consists of 76 cars.

The two five-ton locomotives have seen much hard service and are not in good condition. In the near future it will be necessary to replace one of these by a larger machine of more modern design.

The track and cars are in fair condition.

Peña Blanca Machine and Blacksmith Shop.

The present method of heating machine drill steel bits for sharpening and tempering is in an open charcoal fire. When drilling was done only by hand, this method was satisfactory; but in machine work better heat control, particularly in tempering, is required if the greatest footage of holes drilled is to be obtained per drill bit sharpened. In the coming year, therefore, some experiments are planned with furnaces using gas obtained from a charcoal gas-producer and with an electric furnace. An oil furnace, successfully used by many mines, is not being considered, as, unfortunately, the cost of oil is prohibitive.

THE MILL

Tonnage Crushed

	1922	1920
Total wet tons received	79,471	153,667
Average per cent moisture	12.8	8.5
Total dry tons milled	69,470	140,100
Average tons per day milled (365 days)	190	383.8
Average tons per day milled, full running time (211.7 days)	328	
Average tons per day milled, full running time (339.2 days)		413.
Average tons per day milled per 1850 lbs. stamp full running time	16.4	20.6
Number of 1850 lbs. stamps	20	20
Total tons crushed by present mill	1,099,248	

Recovery

	1922	1920
Average ounces silver received, per ton..	23.494	14.193
Total ounces silver received	1,632,128	1,988,372
Average ounces silver recovered, per ton	20.851	12.215
Total ounces silver recovered	1,449,900	1,711,349
Average silver recovery, per cent.....	88.84	86.07
Average ounces gold received, per ton...	.0684	.0604
Total ounces gold received	4,752	8,465
Average ounces gold recovered, per ton..	.0627	.0571
Total ounces gold recovered	4,357	8,001
Average gold recovery, per cent.....	91.79	94.52

THE MILL

Supplies Used

	1922 Per Ton Ore Crushed Tonnage 69,470	1920 Per Ton Ore Crushed Tonnage 140,100	1922 Per Oz. Fine Bul'n Produced Grade of Ore Ag. 23.494 Au. .0684	1920 Per Oz. Fine Bul'n Produced Grade of Ore Ag. 14.193 Au. .0604
Cyanide 96-98%.....	4.795 lbs.	3.166 lbs.	.229058 lbs.	.257979 lbs.
Aluminum Dust		0.147 "		.005008 "
Zinc Dust	1.030 "	0.686 "	.049193 "	.032201 "
Muriatic Acid	0.063 "	0.059 "	.003023 "	.004774 "
Lime 100%	12.302 "	10.428 "	.587668 "	.849718 "
Borax	0.041 "	0.034 "	.001960 "	.002792 "
Soda	0.021 "	0.016 "	.000985 "	.001280 "
Fuel Oil	0.070 gal.	0.047 gal.	.003325 gal.	.003839 gal.
Artificial Pebbles	68.657 lbs.	40.272 lbs.	3.279750 lbs.	3.281537 lbs.
Foreign Pebbles	2.762 "	0.471 "	.131938 "	.038387 "

Total Milling Costs

	Total Costs 1922	Total Costs 1920	Cost per Ton 1922	Cost per Ton 1920	Cost per Ounce Fine Bullion Produced 1922	Cost per Ounce Fine Bullion Produced 1920
Labor	38,054.92	62,031.20	.55	.44	.026	.036
Supplies ..	162,583.69	250,746.12	2.34	1.79	.112	.146
Power	8,674.45	13,577.36	.12	.10	.006	.008
Total	209,313.06	326,354.68	3.01	2.33	.144	.190

USCy.	1922	1920
Tons Crushed	69,470	140,100
Fine Oz. Bullion produced.	1,454,257	1,719,350

Recovery.

On the whole, the ore treated was more refractory than has been the case for some years and due mostly to the Salvador vein. Nevertheless, recovery of the principal product, silver, was 88.84% or 2.77% higher than in 1920, and was made possible by treatment of higher grade ore (23.49 oz. Ag. against

14.19 oz. Ag. in 1920), to longer period of treatment (77½ hours against 60¾ hours in 1920) owing to the lower tonnage milled, to higher extraction (90.27% against 88.68% in 1920) and to lower dissolved value loss (1.43% against 2.61% in 1920).

On the other hand, the gold recovery was 91.70%, or 2.82% lower than in 1920. The reason for this decrease can be laid entirely to the refractory character of the ore and particularly that from the Esperanza section of the Mine where the gold seems to be less free and very closely associated with the sulphides of silver and of the base metals. The mill and cyanide plant is adjusted to treat silver ore and as such the fineness of grinding, strength of cyanide solutions and period of treatment is much in excess of requirements to treat gold ore alone. Therefore, there is nothing that can be done to better the gold recovery, as this depends entirely upon the character of the ore milled.

The value of gold produced in the past year represents less than 10% of the value of the silver produced, so a drop of 2.82% in gold recovery has less than 10% the significance than if this drop had been in the silver.

Precipitation.

The Crowe Vacuum Process continued to effect an important saving in zinc dust. That an increase in the consumption of this occurred, when compared with 1920, is due entirely to a large quantity being on hand for quite some time which had to be used and which, due to climatic conditions, had become partly oxidized. Since new zinc dust has been used, the consumption of this per ounce of bullion precipitated is as low as and even lower than in 1920.

Melting.

It cost $10.08 per bar to melt precipitates producing 928 bars Doré Bullion against $8.57 per bar for 1,097 bars in 1920.

The expenditures made for repairs, replacements and improvements during the eight months' shut down in 1921 and during the past year proved a very good investment. Due to this, mechanics and carpenters carried on the mill payroll were dispensed with and the current repair work is now well taken care of by the Mechanical Department with no increased staff in this department.

A brief description of the repairs, improvements and changes in methods of operation is given in the following:

Mill Approach Trestle.

This trestle, built of wood, was in dangerous condition due to deterioration. In the early part of the year it was nearly entirely renovated and without any interruptions whatsoever to ore deliveries over the Electric Haulage.

Grizzly Bars.

Ore deliveries used to be frequently limited by the inability to remove quickly enough the oversize from the grizzly bars. This would be particularly true when the ore came sticky. By increasing the space between the grizzly bars from 1¾" to 3" this difficulty was entirely overcome with the result that ore receipts per shift can now be increased at least 30%.

While it would seem that with a 3" spacing the resulting coarser ore would decrease the capacity of the stamps, such did not prove to be the case. The past year has shown that coarser material under an 1850 lb. stamp goes through the battery at about the same rate as the finer.

Crushers.

The two Gates Gyratory Rock Crushers were overhauled and the crusher floor completely renovated. The crushers were also moved nearer the center of the Ore Bin. This change, by throwing the ore nearer the bin battery gates and also permitting freer discharge of the grizzly product into the bin eliminated much of the shoveling formerly necessary when ore in the bin got low.

Stamps.

The four batteries of five 1850 lb. stamps each were thoroughly overhauled. The Challenge ore feeders were somewhat altered and equipped with a rope drive which has proved successful and more economical in upkeep of the feeders. Patching battery liners by welding pieces of old tube mill liners has proved profitable.

Extensive experiments throughout the year as to the size of screens to be used which would prove most advantageous to maintain a silver extraction of around 90% at a crushing rate of about 9,000 tons per month have shown that a combination of No. 3 and No. 4 mesh is the best.

Classifiers.

The classifiers were rearranged to better advantage, both as regards increased efficiency and convience of operation. One new 72" Duplex Dorr Classifier and one locally made dewater-

ing wheel, or classifier, to serve the 16″ x 4′6″ Hardinge Ball Mill were added.

Launders.

All mill launders were renewed and arranged more simply. They are now lined with manganese steel plates made from worn out tube mill liners and should therefore last a very long time.

Tube Mills.

Two of the three 5′ x 22′ tube mills acting as coarse grinders used mine rock and ore as grinding media in place of European flint pebbles, imported at great cost. The advantage gained when using this mine material is decidedly lower tube milling cost; the disadvantage, more rapid wear of tube mill liners and decreased grinding efficiency. The greater cost for liners is a small item when compared with the saving effected. The decreased grinding efficiency did not enter as a factor at all in the past year, as the plant operated only at about 50% of its full capacity. In the event of the plant again operating at full capacity, that is, at the rate of 350 to 400 tons per day, it would be very advantageous to continue using mine material, as at present, but make up the decreased grinding effect by installing an additional tube mill. As a full milling capacity schedule is anticipated in the near future, the tube mill needed has already been purchased. While mine material as grinding media has been used here for over five years, the eight months' suspension period permitted making alterations and additions so that this can now be placed in the tube mills with the least expenditure of time and labor. The result is we can charge one tube mill with 3.5 tons of it in less than twenty minutes.

The third 5′ x 22′ tube mill, which is used as a fine grinder, used European flint pebbles as grinding media because mine material is not as effective at this stage of grinding as at the other. However, it is probable that mine material will be also used in this mill when the additional mill, already mentioned, is installed. In this either flint pebbles or steel balls will be used.

Air Lifts.

The single stage air lifts, a constant source of trouble and even value loss, which returned the oversize from No. 3 Tube Mill to the primary classifiers and required about 60 lbs. air pressure to operate, were converted into two stage lifts. The maximum pressure now needed is but 30 lbs., and the improved design of the new lifts has proved so successful that during the entire year there was not a single instance of choking or of

other difficulties. When it is considered that the choking of an air lift means either stoppage of the mill or diverting the inadequately ground ore to the cyanide plant and affecting adversely the extraction, the importance of this improvement will be realized.

Air Compressor.

The Ingersoll-Rand Air Compressor, of 1,000 cubic feet per minute capacity, was equipped with new cylinders of improved design and given a complete overhauling. It rendered most satisfactory service and at much reduced cost.

Slime Presses.

Due both to the complete overhauling the Merrill slime presses received during the shut down and to better supervision, better results were obtained from these than ever before. It was found that turning compressed air on the cakes for about five minutes at the end of the water wash decreased the dissolved value loss by 50%, when compared with 1920 figures and when due to lack of time, caused by the heavy tonnage milled, the use of compressed air was not possible.

Mill Piping.

Most of the solution pipes were taken apart and a very large quantity of incrustation removed. Some of the pipes were also rearranged to facilitate operation of the plant. Some repairs and replacements were made and upon completion all piping in the mill was given a good coat of paint.

Cyanide Tanks.

All the steel tanks in the mill are in rather bad condition, but it was not possible to effect repairs either during the suspension period in 1921 or in the past year. All were scraped and given a coat of paint, however, and in the coming year it is expected that actual repair work will be started.

The high agitation tanks appear particularly bad and shall, therefore, receive first attention.

Mill Building.

All deteriorated timber in the mill building was replaced and then the entire inside of the building given two coats of whitewash. Openings were made in several places to give better light.

Slimes Canal.

The wooden slimes canal 12,000 feet in length and which carries the mill tailing through San Juancito and other settle-

ments, was erected in 1911. In 1921 and in the past year much work was done to put it in good condition, with the result that fewer complaints of poisoning of stock are anticipated in the coming year.

HYDRO-ELECTRIC POWER PLANTS

San Juancito Plant.

The San Juancito plant is equipped with two Pelton Wheels of 600 H. P. each, to each of which is directly connected one 350 K. V. A., 6600 volt, 60 cycle, A. C. generator. The static head is 1355 feet, length of 20", 17" and 14" pipe 4739 feet, and length of wooden flumes 17,000 feet. This plant rendered efficient service throughout the year and without interruptions due to electrical trouble. Its output was 3,499,260 kilowatt hours.

The pipe line was scraped and repainted and it was found that, though in continuous service for over twelve years, the amount of deterioration, so far as the outside surface is concerned, has been small.

In the early part of the year the large wooden tank of 20,000 cubic feet capacity, situated at the head end of the pipe, collapsed due to deterioration. Owing to operations being carried on at about 60% of full capacity, the lack of this tank was not seriously felt. In its place a reservoir of about 100,000 cubic feet capacity is to be built, and as the plan is to have this sunk in rock and lined with cement it will be a permanent piece of construction.

The Aguacatal and Escobales flumes are both built of wood and are showing the effects of over twelve years' continuous use and deterioration. However, in the coming year efforts will be made to overhaul them and it is expected that, when this is concluded, three or four years' more service can be obtained at moderate upkeep cost.

Guadalupe Plant.

The equipment of this plant consists of two 450 H. P. Pelton Wheels, to each of which is directly connected one 350 K. V. A., 6600 volt, 60 cycle, A. C. generator. The static head is 490 feet, length of 20" pipe 2350 feet and length of flume, built of wood, 6000 feet.

The service rendered by this plant was not as dependable or satisfactory as that of the San Juancito plant, due mostly to the badly deteriorated condition of the flume line and pipe. Its output was therefore only 749,160 kilowatt hours.

The urgency of replacing the flume was mentioned in previous reports, but it was not possible to do this until in the year just closed. The new flume is of larger dimensions, being of 2,000 cubic feet per minute capacity against 1,150 cubic feet of the old, which was too small. Patching of the pipe was concluded in the early part of the year and its condition is now such that, with occasional repairs, it should last for some years. Owing to its very bad condition, it took nearly a year to effect repairs. The patches were welded on electrically.

Tranmission Lines.

There are 23,000 feet of high voltage transmission lines on the property. In a country of dense tropical growth and where deterioration due to climate and wood-destroying insects is rapid, constant inspection and upkeep is necessary. In the past year this work was up to standard.

The comparative distribution of power and its cost was as follows:

POWER DISTRIBUTION

	Kilowatt Hours 1922	K.W. Hours per ton 1922	Kilowatt Hours 1920	K.W.Hours per ton 1920
Mine Power	1,340,523	19,296	2,006,007	14,318
Electric Haulage	171,053	2,462	257,282	1,836
Mine Lights	15,961	.230	16,257	.116
Mill Power	2,552,291	36,739	3,911,482	27,919
Mill Lights	22,657	.326	32,157	.230
Surface Lights	24,331	.350	32,159	.230
Surface Power	84,763	1.220	128,640	.918
Machine Shop	23,214	.334	28,768	.205
Laboratory	13,627	.196	19,298	.139
	4,248,420	61.153	6,432,050	45.911
Decrease	2,183.630			
Cost per Kilowatt Hour	$.00347		$.00343	
Increase	$.00004			

Based on horsepower generated, we show	1922	1920
Horsepower Hours	5,694,932	8,622,051
Cost per Horsepower Hour	$ .00259	$ .00255
Cost per Horsepower Year	$2.268	$2.233
Increase	$ .035	

Power Cost Per Ton

	1922	1920
Mine Department	$.0798	$.0554
Mill Department	.1248	.0969
All Other Departments	.0078	.0051
Total Power Cost per ton	$.2124	$.1574

Owing to economies effected, the cost per horsepower year for 1922 was $2.268, or but 3½c more than in 1920 when 35% more power was produced.

Rainfall.

	1922	1921	1920
Total rainfall, inches	59.35	70.82	71.18
Number of days during which rain fell	153	193	179
Greatest rainfall in any one month	11.08 June	15.59 June	16.19 June
Greatest single rainfall	4.78	4.00	5.57

The year 1922 was a dry one compared with the two previous years, as shown in the table above. However, as power requirements in 1922 were about 35% below normal, the effect of the decreased rainfall was not felt.

MECHANICAL DEPARTMENT

Though repairs to mechanical equipment on the property are on the increase, due to this now having seen eleven years' continuous service, the Mechanical Department was able to handle all repair jobs promptly. The electric welding set played a very important part in this and also in making certain fittings which formerly it was necessary to purchase at several times their present cost.

It is expected that in the coming year much needed overhauling of all the steel tanks in the Mill will commence. Should the present electric welding set prove inadequate, one of larger capacity will be ordered.

There were no additions to the machine shop equipment during the year.

Assay Office and Laboratory

This department is fully equipped to make accurate analyses of general ores. In the past year 14,652 assays were made at a cost of 41c per assay against 28,334 at 32c per assay in 1920. The reduced personnel in the past year could have handled as many assays as in 1920, in which case the cost per assay would have been much lower.

Medical Department

With the exception of one mild epidemic of influenza, health conditions among the five-odd-thousand people living on the Company's property were normal. 3,805 cases received attention during the year, among which 251 were of the foreign colony. The total cost of maintaining the Medical Department was $6,074 or $826 less than in 1920.

The present building serving as a hospital ward for native cases is in very bad condition; therefore, in the coming year the building formerly occupied by the Honduras Store will be used for that purpose.

Hotel

The unmarried staff employees are maintained at the Hotel operated by the Company. There were served 27,432 meals at 48c per meal, compared with 27,722 meals at 64c per meal in 1920. Reduction in cost is due to lower price of food articles and less help.

In the latter part of the year an electric hotel range was installed which, besides rendering excellent service, has reduced the fuel bill very considerably.

Schools

In consideration of the exemption of all municipal taxes, the Company, among other things, is obliged to maintain the primary schools of San Juancito. This item of expense, $5,900, was $832 less than in 1920.

The average attendance in 1922 was 84 boys and 92 girls, compared with 85 and 76 respectively in 1920.

The two school buildings and teachers' quarters have already undergone considerable repair and it is expected that in the coming year this work will be concluded.

Police and Garrison

In conformity with one of its Federal concession obligations, the Company is obliged to maintain a military garrison on its zone, on which the town of San Juancito is also situated. The maintenance cost of this department, which includes special watchmen, was $10,728 against $15,351 in 1920 or $4,623 less.

The force is about the same, namely about 60 officers and men and the reduction in cost is due principally to changes in methods of administration.

The garrison building is in bad condition, but it is planned to effect the most urgent repairs in the coming year.

Roads

The Company has more than 35 miles of roads to maintain and in the past year these were kept in average condition at a cost of $2,095. In the coming year it will be necessary to extend some of the lumber roads to open up new sources for mine tim-

ber and for lumber. About three miles of road building is contemplated.

Timber Supply

The supply of hard wood timber for underground work, not a great distance away from the principal mine openings, is ample for some years to come. On the other hand, pine timber suitable for construction purposes must be brought over a distance of 12 miles or more and consequently is costly. It is possible to obtain an adequate supply of pine by raising the price, but as most of it goes into upkeep of flume lines, it is proposed to try hard wood, much more cheaply obtainable, and see how this serves.

Agencies

The location of the Rosario property makes it necessary to have agents at Amapala—the Pacific port of entry for all supplies, at San Lorenzo—the port from which these supplies are forwarded to the Mine, at Tegucigalpa and at Puerto Cortes.

Owing to the Company's Agents at the port of Amapala, the Pacific Mail Steamship Co., withdrawing from the agency business there, the long established firm of Messrs. Pablo Uhler and Company were appointed agents in September, 1922. A contract was accordingly entered into for the handling of all Rosario freight and that of the Sabana Grande Honduras Mining Company at a rate per ton lower than ever before. The large building facing the water front and owned by the Company was advantageously rented. Opportunity of change in agents was taken to effect other important economies. There is every reason to believe that these new arrangements at Amapala will prove satisfactory.

The living quarters, office space, warehouse and stable maintained by the Company for many years in Tegucigalpa, and at increasing expense, were given up, partly in 1921, and entirely in the early part of last year. A small room and a decreased and much less expensive personnel proved sufficient to carry on the Company's Tegucigalpa business in 1922.

The total saving, since reorganization of all the agencies commenced, is shown in the following comparative statement:

Year	Total Cost
1918	$18,678
1919	10,005
1920	8,193
1921	5,810
1922	3,905

EXPANSION

Sabana Grande Honduras Mining Co.

As stated in the 1920 and 1921 reports, the San Marcos Mine, representing the holdings of the Sabana Grande Honduras Mining Company, was closed, owing to destruction by fire of the Mill and Assay Office.

Reconstruction was started at once but suspended owing to the drop in the price of silver. Power is an item which represented over 23% of the total operating cost on this property; therefore it was considered that, if it was possible to reduce this appreciably, it would play a very important part in permitting resumption of operations at some profit, even with silver at but 67c per ounce. The Government of Honduras was appealed to and on May 22, 1922, generously granted exemptions of the heavy road tax and other taxes for a period of four years. Arrangements were also made for the purchase of Diesel oil from the tank at La Union, Salvador, instead of directly from the United States in expensive steel drums, and a contract entered into for its cheaper handling across the bay from La Union, Salvador, to San Lorenzo, Honduras. It is estimated that with these benefits and the use of less wasteful oil engines the power cost should be reduced by at least 50%.

Reconstruction was, therefore, resumed in June, 1922, and unwatering the Mine began in July. In September the lower 130 level was reached and found caved. But after two months' recovery work, development was started in the N. E. heading towards the San Marcos-Amaya veins junction, where ore is expected. Unwatering the Mine continued and it is expected that the lower 250 level will be reached in the first month of the coming year. The present plan is not to work below the lower 250 level unless silver shows a marked advance in price.

It is expected that in the early part of 1923 the Mine will be in shape to permit development and stoping from the lower 250 level upward and that the Mill will also be completed within that period. The new Mill is substantially the same as the one destroyed, but improvements tending to better value recovery and cheaper operation, indicated by past experience, are being made.

In the coming year efforts will be made to do as much development as is consistent with the price of silver. Development of first importance, already started, is towards the San Marcos-Amaya veins junction at the lower 130 level, at which on the upper 25 level some exceedingly good ore was obtained. If the junction and its vicinity at the lower 130 contains ore,

development will immediately be started for this point at the lower 250 level.

Prospecting

In the past year no engineer was kept in the field to examine mining prospects in other parts of the Republic.

Several prospects were brought to our attention during the year, but rejected, owing to existence of reliable reports on these and which are unsatisfactory.

The Republic of Honduras has been gone over rather thoroughly in the course of the centuries in the search for mines, and evidence of mining work can be found in all known localities where indications of precious metals exist. This by no means implies that possibilities of finding pay mines no longer exist, but only that we have no virgin country to cull over, as might be supposed.

Caved condition of underground workings and dense tropical growth over surface exposures very often necessitate considerable expense and time before an examination can even be attempted.

In the coming year it is planned to look over several likely-looking prospects.

Rosario Concession

In compliance with provisions of Article 5 of the Federal Concession granted the Company on April 27th, 1920 and defined in specifications covered by Acuerdo of September 20th of the same year, both approved by the Honduras Congress, the Company concluded, in May, 1922, a portion of its obligations by installing and putting into service the dam at Jutiapa and 40,000 odd feet of 14", 12" and 10" asphalt covered spiral riveted pipe acting as water conduit between this dam and the city reservoirs at Picacho, 1,000 feet lower in elevation.

In installing this pipe, steep gulches, 900 feet deep in places, had to be crossed and the work, in general, presented all the difficulties incident to laying large pipe over a very rough mountainous country subject to heavy rains and landslides; but no expense was spared to assure a lasting and efficient installation, and there is every reason to believe it will serve for many years to come.

The installation of 17,000 odd feet of piping in the streets of Tegucigalpa and Comayaguela still remains, and this work will commence as soon as weather permits.

Standing in the Country

The standing of the Company in Honduras continues to be of the highest. Most cordial relations exist with the Government, and his Excellency the President, General Rafael Lopez Gutierrez, and the members of his Cabinet have proved most considerate and kind. When, in the past year, owing to revolutionary trouble, a general recruiting order went into effect and such large numbers of our men were called that it meant entire suspension of operations, His Excellency was appealed to, with the result that in our case the recruiting order was rescinded. Due to this, ours proved the only enterprise of any magnitude in the Country able to operate normally.

CONCLUSION

The situation confronting your staff at the beginning of the year, when operations were resumed, was one of making the property pay a profit commensurate with the investment, and with silver and other market conditions but little better than at the time operations were suspended to avoid running at a loss.

The successful exploitation of a mining enterprise, such as the Rosario, situated in a foreign country, a hundred miles from the nearest sea-coast, in a very mountainous region and rough mountain roads the only means of access for supplies, adds many branches to the economics of mining not met with by mines more favorably located. But every branch of the enterprise, technical, mechanical, financial, administrative, received careful study from the standpoint of better efficiency and lower operating expense, with the result that very many changes were the outcome. It has been the endeavor to describe in this report some of the more important changes and improvements and also their effect. It is gratifying to observe that they have proved practical and beneficial in so many instances and, what is more important still, having successfully stood the test of one year's continuous operation, there is every reason to believe they can be considered permanent.

Turning to operations for the coming year, the position of the Mine with respect to ore reserves is about as favorable as at the beginning of the year just closed, prospects for new ore discoveries on the whole as promising, and somewhat better mining conditions are anticipated. The Mill, owing to general rehabilitation and rearrangement of units tending toward better metallurgical efficiency and lower operating cost, is expected to produce as good results as in the past year, if not better. The departments upon which the maintenance of the Mine and the

Mill equipment largely depends are in a position to continue rendering the same efficient service and also to proceed at a good rate with the many repairs still remaining. Therefore, unless very unforeseen conditions arise, there is no reason why the coming year should not be productive of as good results as that just closed, and perhaps better. Furthermore, there is still opportunity for changes leading to greater economy, and, if fuller consideration shows such changes advisable, they shall be made at once.

In establishing operations on the new basis your staff was beset with many difficulties, as it is hard to combat traditions and customs, the outgrowth of forty years' continuous operation. Unlooked-for situations arose which had to be met instantly, while others, and for which every preparation had been made, never occurred.

This occasion is taken to draw your attention to and express appreciation for the full cooperation and faithful service received from all the members of the staff, to whom large credit for what has been done in the past year must be given; also appreciation to the gentlemen of the Board of Directors and Officers of the Company for their full confidence and support, and without which the performance of the past year's task would not have been possible.

Respectfully submitted,

A. R. GORDON,

General Manager.

Annex "A"

Summary of Calculated Ore Reserves

(At 13 cu. ft. per ton)

	Av. Width Feet	Per Cent Waste	Ton of Ore & Waste	Oz. Ag. per ton	Oz. Au. per ton	Total Oz. Ag.	Total Oz. Au.
San Miguel	1.6	35.2	4,644	15.4	.06	71,518	279
South San Miguel South San Miguel Hilo So. San Miguel Stringer	1.5	37.0	22,669	17.6	.07	398,974	1,587
Culebra	1.6	38.4	15,402	13.7	.07	211,007	1,078
Carmen	1.2	52.0	10,691	20.5	.045	219,166	481
San Joaquin	1.0	60.0	6,449	10.5	.14	67,715	903
Salvador	2.6	36.0	58,626	22.6	.03	1,324,948	1,759
South West	2.1	30.0	6,500	20.5	.05	133,250	325
Fortuna	1.2	60.0	8,909	16.7	.03	148,780	267
TOTALS	2.02	40.16	133,890	19.23	.050	2,575,358	6,679

Summary of Estimated Ore Reserves

(At 13 cu. ft. per ton)

Candelaria	3,000	11.5	.075	34,500	225
Colonia	3,000	13.5	.075	40,500	225
Buena Ventura	3,000	12.0	.06	36,000	180
Esperanza	1,500	15.0	.05	22,500	75
Guadalupe	1,000	12.0	.03	12,000	30
Nueva	1,500	11.8	.06	17,700	90
North West	3,000	14.5	.07	43,500	210
Rosario	5,000	12.0	.08	60,000	400
West	1,500	14.0	.04	21,000	60
Jucuara	2,000	12.0	.05	24,000	100
Porvenir	2,000	12.8	.05	25,600	100
Capitana	3,000	9.0	.15	27,000	450
TOTALS	29,500	12.35	.073	364,300	2,145

Summary of Estimated Fills

(At 17 cu. ft. per ton)

West	2,000	10.0	.04	20,000	20
Guadalupe	3,000	10.0	.04	30,000	120
Buena Ventura	1,500	10.0	.05	15,000	75
Candelaria	3,000	10.0	.06	30,000	180
Rosario	4,000	10.0	.05	40,000	200
TOTALS	13,500	10.0	.049	135,000	655

Summary

Calculated Ore	133,890	19.23	.050	2,575,358	6,679
Estimated Ore	29,500	12.35	.073	364,300	2,145
Estimated Fills	13,500	10.00	.049	135,000	655
Broken Ore in Stopes	19,126	17.01	.055	325,333	1,052
TOTALS	196,016	17.35	.054	3,399,991	10,531

Average metal content per ton at mill—Silver 17.35 oz.
Gold .054 oz.

Annex "B"

BROKEN ORE IN STOPES

December 31, 1922

(At 21 cu. ft. per ton)

Total by Veins

VEINS	Tons
Buena Ventura	483
Candelaria	1,160
Carmen	117
Colonia	300
Culebra	3,369
Fortuna	963
Northwest	504
Rosario	3,200
San Joaquin	453
South San Miguel Hilo	75
Salvador	8,002
Chute No. 8	500
GRAND TOTAL	19,126

Annex "C"

Development for Year 1922

	Drifts	X-Cuts	Raises	Winzes	Total
South San Miguel	176.0	75.5	50.0	21.0	322.5 feet
South San Miguel Hilo	245.5	....	....	....	245.5 "
Culebra	190.0	90.0	209.5	....	489.5 "
Buena Ventura	30.0	15.0	....	15.0	60.0 "
Guadalupe	....	37.5	....	....	37.5 "
Salvador	2067.5	94.0	285.5	....	2447.0 "
Salvador Shaft	....	....	....	55.0	55.0 "
Esperanza X-Cut	....	340.0	....	....	340.0 "
Esperanza X-Cut Stringers	86.0	34.0	....	....	120.0 "
Fortuna	198.5	....	....	....	198.5 "
Rosario	149.0	31.0	153.0	....	333.0 "
Carmen	157.5	9.5	67.0	....	234.0 "
Candelaria	5.0	....	....	....	5.0 "
TOTALS	3305.0	726.5	765.0	91.0	4887.5 feet

Annex "D"
ORE PRODUCTION 1922
(Dry Tons)

From Stoping Operations—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
North San Miguel	...	9	4	...	...	...	...	...	...	...	...	...	13
South San Miguel	251	602	1,033	1,355	601	458	651	805	542	629	313	185	7,425
South San Miguel Hilo	206	123	315	326	262	229	302	463	280	119	...	...	2,625
Candelaria	121	135	80	522	324	29	228	512	366	50	...	...	2,367
Culebra	967	1,351	1,417	943	988	460	1,069	1,374	957	832	1,162	1,191	12,711
Buena Ventura	509	380	352	230	165	40	333	127	139	292	76	202	2,845
North West	6	97	119	58	80	22	132	176	238	196	175	250	1,549
Rosario	...	...	471	840	608	153	549	657	492	788	1,107	1,163	6,828
San Joaquin	23	10	...	85	88	67	106	16	...	...	28	21	444
Carmen	632	652	582	348	381	160	157	320	131	165	286	326	4,140
Fortuna	173	308	258	227	65	90	172	571	238	231	184	358	2,875
Salvador	764	416	611	797	764	576	918	1,210	1,287	1,639	1,479	1,304	11,765
West	...	...	...	59	112	...	62	148	54	71	53	1	560
Guadalupe	...	...	...	11	...	...	...	...	...	...	...	...	11
	3,652	4,083	5,242	5,801	4,438	2,284	4,679	6,379	4,724	5,012	4,863	5,001	56,158
From Development Excavations	645	451	387	500	273	92	368	250	155	418	441	564	4,544
From Stope Fills—													
Rosario	454	641	779	386	144	88	225	199	240	...	...	54	3,210
West	40	297	653	575	260	23	259	391	408	436	396	357	4,095
Buena Ventura	...	...	...	...	...	...	...	10	7	...	...	...	17
South San Miguel	...	...	...	...	...	...	...	...	...	...	...	180	180
Candelaria	...	...	...	7	...	...	...	...	...	...	...	13	20
Guadalupe	...	...	...	...	...	...	70	...	...	...	73	313	456
North West	44	39	...	...	...	...	...	...	...	...	...	...	83
	538	977	1,432	968	404	111	554	600	655	436	469	917	8,061
GRAND TOTAL	4,835	5,511	7,061	7,269	5,115	2,487	5,601	7,229	5,534	5,866	5,773	6,482	68,763

Summary

Total Production from Stoping Operations	56,158	tons
Total Production from Development Excavations	4,544	tons
Total Production from Stope Fills	8,061	tons
GRAND TOTAL	68,763	tons

Annex "E"

Tonnage Mined from October 1st, 1907, to January 1st, 1923

	ORE FROM VEINS	Oct., 1907 to Jan. 1, 1916	1916 Jan. to Jan.	1917 Jan. to Jan.	1918 Jan. to Jan.	1919 Jan. to Jan.	1920 Jan. to Jan.	1921 Jan. to Jan.	1922 Jan. to Jan.	Total	Gd. Total Including Fill
1	Buena Ventura	13,159	5,134	6,637	9,840	13,862	7,226	1,668	2,845	60,371	94,740
2	Candelaria	107,240	5,838	7,763	6,952	9,144	9,372	1,323	2,367	149,999	156,282
3	Capitana	35,755	8,979	4,189	1,090	850	2,082	....	....	52,945	52,945
4	Carmen	....	....	....	....	....	2,746	2,109	4,140	8,995	8,995
5	Catalina	2,297	50	....	....	....	....	....	....	2,347	2,347
6	Colonia	28,751	8,455	4,273	3,181	2,235	4,156	708	....	51,759	51,759
7	Concepción	18,461	....	....	133	576	....	....	....	19,170	19,170
8	Crisanta	165	1,710	3,533	1,193	809	....	....	....	7,410	7,410
9	Culebra	2,949	799	1,846	1,380	6,551	8,702	4,547	12,711	39,485	39,485
10	Esperanza	6,329	1,151	457	332	....	....	....	....	8,269	8,269
11	Fortuna	....	....	....	....	....	527	256	2,875	3,658	3,658
12	Guadalupe	10,805	3,003	1,706	3,664	2,193	614	....	11	21,996	60,672
13	Jucuara	508	1,342	357	....	....	....	....	....	2,207	2,207
14	North	4,006	....	....	....	....	....	....	....	4,006	4,006
15	Northwest	10,361	2,013	1,831	1,359	1,307	6,752	2,020	1,549	27,192	65,130
16	Nueva	16,047	636	....	....	....	804	247	....	17,734	27,846
17	Porvenir	....	....	....	72	213	579	95	....	959	959
18	Rosario	38,386	11,715	11,315	8,439	11,529	14,810	3,025	6,828	106,047	124,981
19	Salvador	....	....	....	....	....	376	1,772	11,765	13,913	13,913
20	San Joaquín	17,592	11,304	8,945	7,606	6,638	4,789	5,078	444	62,396	62,396
21	San Miguel Hilo	....	....	....	....	....	....	....	2,625	2,625	2,625
22	San Miguel (North)	132,359	10,250	16,625	6,273	5,532	3,402	347	13	174,801	174,801
23	San Miguel (South)	....	....	4,194	16,539	25,911	24,229	6,430	7,425	84,728	84,908
24	Socorro	5,811	3,258	3,587	3,661	3,493	....	....	....	19,810	19,810
25	Southwest	14,206	4,009	394	152	....	....	....	....	18,761	18,761
26	West	22	1,867	5,400	2,950	1,324	524	....	560	12,647	94,058
27	Ore from Development	4,122	6,471	4,246	7,358	12,117	19,078	5,663	4,544	63,599	63,599
28	Miscellaneous	715	....	....	....	....	....	....	....	715	715
	TOTALS	470,046	87,984	87,298	82,174	104,284	110,768	35,288	60,702	1,038,544	1,266,447
	STOPE FILL										
1	Buena Ventura	3,507	7,019	6,255	8,886	5,405	1,657	1,623	17	34,369	
2	Candelaria	....	....	471	1,246	1,457	3,089	....	20	6,283	
3	Guadalupe	4,105	8,123	7,937	9,125	3,827	3,849	1,254	456	38,676	
4	Northwest	2,759	9,402	5,509	8,601	5,947	4,814	823	83	37,938	
5	Nueva	....	504	2,918	2,210	1,369	2,430	681	....	10,112	
6	Rosario	5,713	3,092	2,755	3,026	14	713	411	3,210	18,934	
7	San Miguel (South)	....	....	....	....	....	....	....	180	180	
8	West	9,745	11,906	12,757	14,632	11,699	12,767	3,810	4,095	81,411	
	TOTALS	25,829	40,046	38,602	47,726	29,718	29,319	8,602	8,061	227,903	
	GRAND TOTALS	495,875	128,030	125,900	129,900	134,002	140,087	43,890	68,763	1,266,447	1,266,447

Condensed Balance Sheet

New York & Honduras Rosario Mining Company

New York—December 31, 1922

ASSETS

Permanent—		
Mines, Real Estate and Concessions	$3,000,000.00	
Plant, Buildings, Machinery and Equipment	$1,256,106.33	
Less: Allowance for Depreciation	675,789.91	
	580,316.42	
		$3,580,316.42
Current—		
Cash	$73,454.88	
Loans Receivable plus Interest	234,968.73	
Bullion at Smelters and in Transit at Market	142,270.00	
Broken Ore in Stopes and Mill Bin at Cost	91,467.00	
Materials and Supplies at Cost	191,771.69	
U. S. Liberty Bonds at Market plus Interest	207,835.48	
Greenville Co., S. C., Bonds at Cost plus Int.	103,819.45	
Foreign Governments' Bonds at Cost plus Int.	75,910.08	
Domestic R. R. Bonds at Cost plus Interest	73,212.71	
Domestic Industrial Bonds at Cost plus Int.	103,833.03	
		1,298,543.95
Other Assets—		
Investments—Capital Stock of other Companies	$51,853.00	
Advances to Other Companies less Allowance for Shrinkage	88,088.11	
Miscellaneous Accounts Receivable	3,531.64	
		143,472.75
Deferred Charges—		
Prepaid Insurance, Taxes and Expenses		125,705.96
TOTAL ASSETS		$5,148,039.08

LIABILITIES

Current—		
Drafts Payable	$69,166.40	
Accounts Payable	25,841.98	
Federal Income and Profits Taxes, prior years (Estimated)	123,296.48	
		$218,304.86
Reserves—		
Mine Fire Insurance	$33,004.77	
Transit Insurance	5,159.94	
Depletion of Mines	1,194,728.61	
		1,232,893.32
Capital Stock—		
Authorized and Issued 200,000 Shares (Value $10.00 per Share)	$2,000,000.00	
Surplus—		
Appreciation of Mine Valuation (Less Depletion)	$1,053,918.55	
Earned Surplus	642,922.35	1,696,840.90
		3,696,840.90
		$5,148,039.08

Income and Profit Loss Statement
New York & Honduras Rosario Mining Company
New York—December 31, 1922

Production of Gold and Silver		$1,066,732.57	
Less: Freight and Expenses on Bullion		41,137.56	
Operating Income			$1,025,595.01
Deduct: Operating Expenses			621,409.83
Operating Profit			$404,185.18
Deduct: New York Administrative Expenses			47,826.60
Net Profit from Operations			$356,358.58
Other Income			56,141.14
			$412,499.72
Other Deductions from Income			23,939.50
Net Profit for Year			$388,560.22
Appropriated for Reserves—			
Mine Fire Insurance		$5,295.88	
Advances to Other Companies		16,340.14	
Transit Insurance		2,632.32	
Ore Depletion		138,559.25	
			162,827.59
Profit for Year Carried to Surplus			$225,732.63
Surplus—			
Surplus, January 1, 1922		$1,606,526.38	
Additions—			
Cancelling Reserve for Obsolete Material and Supplies	$11,444.58		
Increasing Value of Liberty Bonds to Market Value Dec. 31, 1922	3,137.31		
	$14,581.89		
Deductions—			
Dividends paid during 1922	$150,000.00	$135,418.11	$1,471,108.27
Surplus—December 31, 1922			$1,696,840.90

Auditors' Certificate

WE HEREBY CERTIFY that we examined the books of account and records of the NEW YORK & HONDURAS ROSARIO MINING COMPANY, New York City, for the year ended December 31, 1922, and subject to the fact that we did not examine the records of the Mine Office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial position of the Company at the date stated and that the relative Income and Profit and Loss Statement is correct.

Very truly yours,

(Signed) ERNST & ERNST.

New York & Honduras Rosario Mining Company

Comparative Statement of Working Capital

December 31	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922
Cash and Cash Items.....	$106,866	$90,618	$112,208	$259,459	$515,562	$684,899	$380,965	$650,199	$692,055	$873,034
Bullion in Transit	207,438	252,348	271,735	353,115	325,260	387,348	805,137	231,770	1,145	142,271
Ore in Stopes and Mill Bin..	89,077	96,884	99,951	122,873	121,171	112,125	95,133	120,977	114,217	91,467
Inventories and Supplies....	250,940	272,805	292,731	300,759	427,908	438,427	377,166	403,393	356,716	317,478
Accounts Receivable	41,805	5,020	1,896	66,497	115,303	62,683	117,876	13,788	18,553	3,531
Total Quick Assets*.....	$696,126	$717,675	$778,521	$1,102,703	$1,505,204	$1,685,482	$1,776,277	$1,420,127	$1,182,686	$1,427,781
Current Liabilities†	91,344	71,138	59,026	257,498	567,783	694,373	522,062	199,069	218,387	218,305
Net Working Capital	$604,782	$646,537	$719,495	$845,205	$937,421	$991,109	$1,254,215	$1,221,058	$964,299	$1,209,476
Increase over Preceding Yr.		41,755	72,958	125,710	92,216	53,688	263,106			245,177
Decrease from Preceding Yr.								33,157	106,759	
Increase over Dec., 1913, Working Capital		41,755	114,713	240,423	332,639	386,327	$649,433	$616,276	$359,517	$604,694
Increase in Investments over 1913		38,309	43,781	103,521	134,794	321,015	442,550	330,448	311,805	356,345
Additions to Plant, Etc., since 1913							260,758	271,884	316,857	340,909
Increase in Assets since 1913‡							$1,352,741	$1,218,608	$988,179	$1,301,948

*Embraces all Cash in Banks and Agencies, Accounts and Notes Receivable, Inventories, but does not include Plants, Real Estate, Mining Property, Equipment nor Investments.

†The Liabilities embrace everything except Capital Stock, Surplus and Reserves. In the years 1920 and 1921, $200,000 included to cover additional Federal taxes for the years 1917 to 1921 inclusive.

‡Excludes increased valuation of mine.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	763,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
	$31,421,486.69

Distributions to Stockholders

1887 No. 1	$37,500— 2½%	Dividend
1888 Nos. 2 to 5	60,000— 4%	Dividend
1889 Nos. 6 to 14	150,000—10%	Dividend
1891 Nos. 15 to 16	30,000— 2%	Dividend
1892 Nos. 17 to 21	165,000—11%	Dividend
1893 Nos. 22 to 25	150,000—10%	Dividend
1894 No. 26	37,500— 2½%	Dividend
1896 Nos. 27 to 28	30,000— 2%	Dividend
1897 Nos. 29 to 40	180,000—12%	Dividend
1898 Nos. 41 to 48	120,000— 8%	Dividend
1899 Nos. 49 to 60	180,000—12%	Dividend
1900 Nos. 61 to 75	225,000—15%	Dividend
1901 Nos. 76 to 93	300,000—20%	Dividend
1902 Nos. 94 to 100	105,000— 7%	Dividend
1903 No. 101	15,000— 1%	Dividend
1904 Nos. 102 to 108	105,000— 7%	Dividend
1905 Nos. 109 to 121	180,000—12%	Dividend
1906 Nos. 122 to 139	285,000—19%	Dividend
1907 Nos. 140 to 153	210,000—14%	Dividend
1908 Nos. 154 to 165	180,000—12%	Dividend
1909 Nos. 166 to 173	120,000— 8%	Dividend
1910 Nos. 174 to 180	105,000— 7%	Dividend
1911 Nos. 181 to 182	90,000— 6%	Dividend
1912 Nos. 183 to 184	70,000— 3½%	Dividend
1913 Nos. 185 to 188	180,000— 9%	Dividend
1914 Nos. 189 to 193	240,000—12%	Dividend
1915 Nos. 194 to 197	240,000—12%	Dividend
1916 Nos. 198 to 205	400,000—20%	Dividend
1917 Nos. 206 to 211	300,000—15%	Dividend
1917 No. 1	100,000— 5%	Amortization
1918 Nos. 212 to 215	200,000—10%	Dividend
1918 Nos. 2 to 5	200,000—10%	Amortization
1919 Nos. 216 to 219	200,000—10%	Dividend
1919 Nos. 6 to 9	200,000—10%	Amortization
1920 Nos. 220 to 225	320,000—16%	Dividend
1920 Nos. 10 to 11	80,000— 4%	Amortization
1921 No. 226	60,000— 3%	Dividend
1922 Nos. 227 to 229	150,000— 7½%	Dividend
Total	$6,000,000	

Dividends 1 to 182, inclusive, on Capital Stock	$1,500,000.00
Dividends 183 to 229, inclusive, on Capital Stock	2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, on Capital Stock	2,000,000.00

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NEW YORK & HONDURAS ROSARIO MINING CO.



FORTY-THIRD ANNUAL REPORT

NINETEEN HUNDRED AND TWENTY-THREE

New York and Honduras Rosario Mining Co. A.R. 1923

Columbia University
in the City of New York

School of Business



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REPORT of the

NEW YORK & HONDURAS ROSARIO MINING CO.

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H. A. GUESS, *Vice-President.*
A. R. GORDON, *Vice-President.*
W. C. LANGLEY, *Treasurer.*
J. PERLMAN, *Secretary.*

BOARD OF DIRECTORS 1924-1925

WM. A. PRENDERGAST, *Chairman.*

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LEWIS L. CLARKE,	W. L. SAUNDERS,
H. A. GUESS,	E. V. SOTO,
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EXECUTIVE COMMITTEE 1924-1925

WM. A. PRENDERGAST, *Chairman.*

SIDNEY ABBEY,	W. L. SAUNDERS,
H. A. GUESS,	AMBROSE G. TODD,

P. R. WEILER

LEWIS L. CLARKE, W. C. LANGLEY } *Ex-Officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company

New York, January 1, 1924.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.
Gentlemen:

This Company's record for the year 1923 *has been most gratifying. Despite an unusually low rainfall, occasioning a serious shortage of power, we have had the largest silver production in the Company's forty-three years of active operations, or* 2,038,210.85 *ounces.*

In common with others in the silver producing industry, we have also had the satisfaction of witnessing the expiration of United States Government purchases under the Pittman Act of 1918, *with hardly any perceptible effect upon the course of silver prices.*

It is also to be noted that we have been fortunate in making our sales of silver for the year at the favorable figure of $.65015 *per ounce, the "New York Official" average quotation being* $.64873 *per ounce.*

I take pleasure in submitting to you the following important items of our operations for 1923:

Dry Tons Ore Treated	87,900
Ounces Silver Produced (Smelter's Final Returns)	2,038,210.85
Ounces Gold Produced (Smelter's Final Returns)	4,681.21
Bars Doré Bullion	1,338
Average Silver Recovery at Mine (per cent.)	89.39
Average Gold Recovery at Mine (per cent.)	93.30
Average Ounces Silver Recovered at Mine per Ton	23.146
Average Ounces Gold Recovered at Mine per Ton	.0571

Value per Ounce Silver Sold	$ .65015
Value Silver Recovered per Ton	$15.0756
Cost of Silver Recovered per Ton	$ 8.2181
Cost of Silver Recovered per Ounce	$ .35442
Net Profit on Silver Recovered per Ton	$ 6.8575
Net Profit on Silver Recovered per Ounce	$ .29573

The Operating Income for the year was	$1,367,881.41
Less: Operating Expenses	713,782.52
Operating Profit	$654,098.89
Less: N. Y. Administrative Expenses	51,325.17
Net Profit from Operations	$602,773.72
Miscellaneous Income, less charges	47,950.37
	$650,724.09
Less: Miscellaneous Expenses	23,523.08
Net Profit for Year	$627,201.01
Less: Appropriated for Reserves	199,954.97
Net Profit before Taxes	$427,246.04
Less: Federal Income Tax	39,873.09
	$387,372.95
Applied to Dividends	300,000.00
Carried to Surplus	$ 87,372.95

Current Assets December 31, 1923, *were*	$1,627,043.37
or an increase over the preceding year of	328,499.42

These are as follows:

Cash	$ 37,094.80
Loans Receivable, plus Interest	437,524.92
Bullion at Smelters and in Transit	307,156.61
Broken Ore in Stopes and Mill Bin—Estimated	88,245.59
Materials and Supplies at Cost	210,782.15

U. S. Liberty Bonds at Market plus Interest	206,845.35
Marketable Securities plus Interest	339,393.95
	$1,627,043.37
There was appropriated for Reserves:	
Mine Fire Insurance	$ 5,308.72
Transit Insurance	2,799.57
Ore Depletion	190,751.05
Reducing Bonds to Market Value	1,095.63
	$199,954.97

Current Liabilities $205,152.76
or a decrease of 13,152.10

These liabilities include $163,175.08 *to cover Federal Income and Profits Taxes for the years* 1918, 1919, 1920 and 1923.

The ratio of Current Assets to Current Liabilities is approximately 8 *to* 1.

Sabana Grande-Honduras Mining Company

Operations at this property were resumed in March, 1923. *Work there has been subject to a number of delays owing to machinery imperfections, which caused a suspension of operations for two months. The exact financial details cannot be given until further explanatory figures are received.*

Expansion

The Company has considered a number of propositions, but none has been accepted. We are carrying on active work at two properties in Honduras at the present time, but the results thus far have not enabled us to decide upon continuing with them.

Government of Honduras

We desire to extend our thanks to the Government of Honduras for the courtesies extended to us.

Audit

The books of the Company have been audited by Messrs. Ernst and Ernst.

Respectfully submitted,
LEWIS L. CLARKE,
President.

ANNUAL REPORT OF THE GENERAL MANAGER

San Juancito, Honduras, January 1, 1924.

To the President:

New York & Honduras Rosario Mining Co.,
New York City.

Dear Sir:

The following report of operations on this Company's properties in Honduras during the fiscal and calender year 1923 is submitted for your consideration:

Production

	1923	1922
Dry tons treated	87,900	69,470
Average contents per ton:		
Ounces silver	25.894	23.494
Ounces gold	.0612	.0684
Ounces silver produced	2,034,492	1,449,899
Ounces gold produced	4,679	4,357
Ratio of silver to gold	435	333
Bars Doré Bullion	1,338	928
Bullion fineness, gold	2.17	2.89
Bullion fineness, silver	945.91	963.20

The production of 2,034,492 ounces of silver is a record one in the history of the Company and exceeds the previous highest record by 200,131 ounces. The proportion of gold to silver is lower than ever before but the smaller gold output, as compared with previous years, was more than made up by an increase in the silver. Unless veins with very marked gold content are found no material increase in gold production can be expected.

There is every reason to believe that, given normal operating conditions in 1924, silver production will be equal to, if not greater than, that of the year past.

Honduras Operating Costs

Basis	1923	1922
Dry tons milled	87,900	69,470
Troy ounces silver produced	2,034,492	1,449,899
Troy ounces gold produced	4,679	4,357

	Total Costs		Per Ton		Per Troy Ounce Fine Bullion Produced	
	1923	1922	1923	1922	1923	1922
Mine						
Labor	$190,271.00	$135,947.00	$2.16	$1.96	$.0935	$.0935
Supplies	123,107.00	90,076.00	1.41	1.30	.0605	.0619
Power	6,456.00	5,547.00	.07	.08	.0032	.0038
Total	$319,834.00	$231,570.00	$3.64	$3.34	$.1572	$.1592

Mill						
Labor	$45,971.00	$38,055.00	$ .52	$ .55	$.0226	$.0261
Supplies	176,890.00	162,583.00	2.01	2.34	.0870	.1118
Power	11,441.00	8,675.00	.13	.12	.0056	.0060
Total	$234,302.00	$209,313.00	$2.66	$3.01	$.1152	$.1439
Honduras Administration	108,131.00	94,754.00	1.23	1.36	.0530	.0652
Totals	$662,267.00	$535,637.00	$7.53	$7.71	$.3254	$.3683
Less value of gold produced	93,584.00	87,140.00	1.06	1.25	.0459	.0599
Net costs	$568,683.00	$448,497.00	$6.47	$6.46	$.2795	$.3084
Cost per Troy ounce silver produced	$.2795	$.3093				

The more economical operating policy, in effect since operations were resumed on January 1, 1922, was strictly adhered to throughout the year and continued to meet with good success. Thus, with mine development footage twice that in 1922, or 9,455 feet against 4,887.5 feet, the operating cost per ton of the Mine Department was but 30 cents higher and on the per ounce basis, owing to record silver production, the same. Milling costs, both from the per ton and per ounce basis, show important reductions. These are due to the greater tonnage treated, better efficiency in the process and cheaper supplies. The Administration cost also shows important decreases, though some heavy items, such as insurance, had to be met in 1923.

The comparative cost figures shown do not include depreciation, majority of tax items, shipment, insurance and marketing of bullion, and New York Office Administration Expense.

FINANCIAL

Exchange

	1923	1922
Drafts on Treasurer sold during the year	$415,481.00	$324,751.00
Yield in Pesos	878,268.00	679,423.00
Rate of Exchange Average for the year	211.346%	209%
Exchange Earnings on Basis of prescribed Rate of Exchange of 200%	$ 23,653.00	$ 14,961.00
Lowest Rate of Exchange during 1923	206%	(August)
Highest Rate of Exchange during 1923	220%	(March)
Rate of Exchange as of December 31, 1923	216%	

Working Capital

	1922	1923	
	$273,370.00	$303,868.00	
Increase of		30,498.00	
Composed of:			
Increase—			
Deferred Charges			$19,663.00
Materials Inventory			31,972.00
			$51,635.00
Decrease—			
Cash		$19,684.00	
Stores		1,453.00	21,137.00
Net Increase			$30,498.00

THE MINE

Ore Reserves

The positive ore reserves as of January 1, 1924, when compared with those reported on January 1, 1923, show an increase of 86,307 tons, 2,465,089 ounces silver and 3,205 ounces gold, notwithstanding that during 1923 there were mined 87,900 tons containing 2,226,082 ounces silver and 5,379 ounces gold.

Summary

	Tons of Ore and Waste	Ozs. Ag. Per Ton	Oz. Au. Per Ton	Total Ozs. Ag.	Total Ozs. Au.
Calculated ore, at 13 cu. ft.	212,800	22.82	.0454	4,856,150	9,671
Estimated ore, at 13 cu. ft.	40,500	12.697	.0628	514,250	2,545
Estimated stope filling, at 17 cu. ft.	9,000	10.00	.036	90,000	325
Broken ore in stopes, at 21 cu. ft.	19,353	20.00	.04	399,060	798
Totals	282,253	20.759	.0472	5,859,460	13,339

The very substantial addition to the reserves in the past year brings these back to more or less the figures of former years and is mainly due to additional ore exposed in the Salvador, Fortuna, Independencia, and Santa Gertrudis veins, the last two discovered during 1923. Readjustment of reserves in some veins, from which little or no ore was mined in the past year, resulted in increases in most instances. Such readjustment was permissible in the light of more information obtained from stoping and development operations in their close vicinity.

The total reserve average per ton of 20.76 ounces Silver and .047 ounces Gold is based on a monthly milling rate of 9,000 tons, 91% silver recovery and silver price of 66 cents per troy ounce.

The waste percentage is based on stoping widths varying from 2.5 feet to 4.5 feet and on the stoping method used.

The calculated reserves are shown on maps accompanying this report. The estimated reserves are of a per ton value indicating little or no profit. But, first, all development and other charges already have been met and, secondly, there is likelihood that while stoping better ore will be encountered. Therefore, a moderate profit can be expected from this class of ore. The same can be said of the small quantity of stope filling remaining in reserve.

The reserve figures shown represent ore most of which has been sufficiently exposed by development for immediate stoping, and do not include prospective ore still requiring development.

A detailed statement of the reserves is given in Annex "A."

DEVELOPMENT

The extent and nature of development footage in each vein during 1923 will be found in Annex "C." The following is a comparative summary:

Summary

Year	Drifts	Crosscuts	Raises	Winzes	Total Feet
1922	3,305.0	726.5	765.0	91.0	4,887.5
1923	5,766.5	1,089.5	2,257.0	42.0	9,455.0

Development footage was nearly double that of the year previous and more generally distributed throughout the mine. Development was kept at a maximum in the Esperanza country and represented 44% of the total footage made as compared with 70% in 1922. The ore reserves are ample evidence of the very good success obtained from last year's development and it is taken up in detail in other parts of this report.

ORE PRODUCTION

The ore supplied to the Mill came from three sources, as shown in the following summary. A detailed statement of ore production for the year is given in Annex "D" and since October 1, 1907 in Annex "E."

	1923 Tons	1922 Tons
Ore obtained by Stoping	76,592	56,158
Ore from Development Excavations	8,328	4,544
Stope Filling	3,016	8,061
Total Delivered to Mill	87,936	68,763
Percentage Stope Filling Mined	3.42	11.7
Number of Producing Veins	17	14

Mining conditions, on the whole, were somewhat better than during 1922. Both development and stoping continued to be concentrated in the Esperanza section which was the source of 52% of the ore mined and seat of 44% of the development footage.

The decrease in stope filling output is due to exhaustion of this material. On the other hand, ore from development excavations was twice that of the year previous, due, in this instance, to double development footage made.

The best interests of the Mine dictate a more general distribution of stoping operations than was the case last year, but labor shortage has prevented this policy being carried out to any extent.

The policy of no night shift or Sunday work in the Mine was strictly adhered to and, together with the "piece-work" method introduced when operations were resumed in 1922, has been an important factor in maintaining a fair degree of efficiency per man. On this basis 307 shifts were worked underground during 1923, the average number of men per shift, including all top men, being 430. Prior to suspension of operations, when night and Sunday work was in vogue, the average number of men per 24 hours was between 850 and 900, 80 percent of whom were on the day shift.

The biggest detrimental factor in underground work, particularly noted in the past two years, one which has very great effect upon production and development, is the lack of fairly efficient labor. About 200 good native underground men more could be used to very good advantage at the present time. But it is rather doubtful if that number is obtainable in Honduras. The shutting down of the mines in Salvador has not diverted many men from that republic, due principally to the more rigorous climate obtaining here. There is and has been for some time, a great shortage of labor in all industries in Honduras and whilst fruit growing interests along the North Coast manage to supply their most pressing needs by importations from neighboring republics and the Islands, of men engaged there in kindred work, no such advantage exists for the mining industry. First there are no other large mining camps in Central America to draw from, and secondly, much more skill being required in underground work than in the fields, considerable time is needed to train men.

No practical solution of the labor problem presents itself at the present time. However, the matter of partly overcoming this difficulty by depending more on mechanical means is being carefully studied. In the coming year experiments will be made with underground shoveling machines, for which a large saving of labor is claimed, and if successful a type of machine best suited probably will be adopted.

VEINS WORKED

A general review of work done in the various veins is taken up under the following headings.

Buena Ventura Vein.

This vein, being away from the present center of mining operations, not much work in it is contemplated in the coming year. As its extensive workings are mostly in hard ground they will remain open indefinitely and permit stoping the small ore reserve existing at any time. The 1,500 tons of stope filling reported last year is not shown in the present reserves as it cannot be mined at a profit.

Candelaria Group.

Some of the development in the past year was preparatory work to facilitate mining at a good rate, the scattered bunches of ore and stope filling existing in the Candelaria vein and its stringers. The old workings have, so far, been found in much worse shape than there was reason to expect so at least another year's preparatory work is necessary before much mining of ore and stope filling can be attempted.

Carmen Vein.

Though little development was done in this vein in 1923 the stopes which supplied ore over the same period indicate that such ore can be expected to extend beyond their supposed ore limits. This, together with indications in the adjacent vein, the Salvador, at the Zero level, that ore exists to this depth in important quantities, permitted dropping the Carmen ore reserve blocks below the Upper 150 level a greater distance, with the result that it is now possible to show a larger tonnage in reserve as compared with that on January 1, 1923 though actual development was small and nearly 4,000 tons were mined.

The proximity of the Carmen to the Fortuna and Salvador veins, together with its dip opposite these will cause an intersection of the three in the vicinity of the Upper 450 level and above. Whether each vein, beyond the intersection, will continue separately or all merge into one vein, will be the endeavor to determine in the coming year.

Colonia Vein.

The 83 feet of development consisted in driving a connecting raise between the Lower 650 and Lower 300 levels. About 100 feet are still lacking before the Lower 300 level is reached. Odds and ends of good grade ore exist on nearly all the levels of the Colonia mine and when the connection is completed mining of these will commence.

Culebra Vein.

Though development in 1923 was comparatively small, and ore production in the same period a record one for this vein, it is still possible to show a reserve which will average 1.30 ounces silver per ton higher and is 7,500 tons greater than that reported a year ago. This increase is due partly to development but mostly to what the heavy stoping in the year past has indicated there is every reason to expect.

Development at the Upper 500 and Upper 350 levels is planned for the coming year.

Catalina Vein.

The workings of this vein are being prepared for the stoping of ore existing at the Upper 150, 250 and 350 levels. It is expected that during 1924 this vein will become a moderate ore producer.

Esperanza Vein No. 3.

This vein was cut by the Esperanza Crosscut in 1913. After moderate production no work has been done in it since 1917. The Esperanza is one of the southern extensions of the South San Miguel. As work is being done in a southerly direction at the Zero level in the South San Miguel, it is expected that the moderate quantity of ore in the Esperanza below the Upper 150 level will be taken out some time within the next two or three years.

Fortuna Vein.

The very substantial increase both in tonnage and value per ton of the ore reserves as compared with those reported a year ago is due to the development indications at the Upper 350 and Upper 450 levels. Thus the probability of this vein becoming more uniform and ore bearing at a moderate distance above the Upper 150 level, as expressed in the 1920 report, has been fully realized. The work in the coming year will consist mostly in further opening up the ore already found and in prospecting the vein above the Upper 450 level and to the northwest, where ore possibilities are good. It is very probable that in 1924 the Fortuna will become an important ore producer.

Independencia Vein.

Last September the Esperanza Crosscut intersected at a point 855 feet from the Salvador vein intersection by this crosscut, a new vein which has been named the Independencia. The 231½ feet of drifting up to date has shown this vein to be a very valuable find, already evidenced by the 12,600 tons of positive ore in reserve, averaging 35 ounces silver and .06 ounces gold per ton. This is the highest average of any reserve in the mine. The Independencia has, so far, proved quite uniform in width and the indications are

that its ratio of gold to silver is somewhat higher than is the case with the Salvador, Fortuna and Carmen veins. It is needless to say the Independencia will undergo intensive development in the coming year with the prospect of opening up a large ore reserve.

North Vein

The workings giving access to this vein at the Upper 350 level are being recovered. While the small amount of ore in reserve will average less than one half foot in width, the intention is to stope this as there are prospects that in certain sections the vein will be wider. The probabilities are that this vein will be a small ore producer during 1924.

Northwest Vein

The 1923 ore production exceeded the total reserve estimate by 3,500 tons, the ore going well over the reserves per ton value average. The 1923 development has exposed some promising sections of the vein and permitted the reserve estimate now shown. Such development was mostly at the Upper 250 level. If necessary, the same quantity and grade of ore as that mined in 1923 can be readily obtained in the coming year.

Rosario Vein

The Rosario vein was a very important producer in 1923, at times of high grade ore. Most of the development was done at the Zero level between Blocks 32 and 36 to better expose ore left in years past. The Lower 300 Level shows indication of extensive sections of the vein which in the near future it is proposed to prospect for a grade of ore now possible to mine at a profit.

Salvador Vein

The development work done in this vein in the past year has come up to all expectations, as is evidenced by the very substantial increase in the ore reserve as compared with than on January 1, 1923, notwithstanding the fact that over 40,000 tons of ore were mined in 1923.

The most essential part of the 1923 development program was further development of the vein at the Upper 250, Upper 350 and the Zero levels and also establishing a new level, the Upper 450. This work, while by no means completed, has indicated that not only do important ore bodies exist at these levels, but that their continuation at these levels, both laterally and vertically, can be expected for an appreciable distance.

The greatest lateral exposure of the Salvador is at the Upper 150 level, the distance between the northwest and southeast headings being 2,300 feet. No ore was found in the last 200 feet driven

in each heading. In the northwest heading the vein entered very hard ground and narrowed to a four inch stringer, while in the southeast it split into numerous quartz stringers, most of which, though of stoping width, are barren. Without further work in these headings it cannot be stated definitely that the lateral limits of the vein have been reached.

As to vertical limits, it seems fairly certain that profitable ore will extend a hundred feet or more below the present deepest level, the Zero. But unless this vein is very different from others in this mine not much ore of present milling grade should be expected at greater depth. The uppermost exposure of the vein at the present time is at the Upper 450 level without any indications of impoverishment as yet noted. It therefore seems fairly certain that profitable ore can be expected for an appreciable distance above the Upper 450.

Opportunity for profitable development in this vein is still very ample and in the coming year it shall continue having first attention.

Most of the ore in reserve being sufficiently exposed to permit stoping at any time, ore production in 1924 can be as heavy as in the year past, should this be desired.

San Joaquin Vein

Though no development and but little stoping was done in the past year, recalculation of the reserves has permitted their increase in quantity by 3,000 tons and in average value by 4.5 ounces silver per ton, as compared with the reserves reported a year ago. No stoping or development is contemplated in the coming year, owing to this vein being away from the present center of mining operations.

The lower 300 level should be extended both to the northeast and northwest as prospects for ore are considered fair.

Santa Gertrudis Vein

The stringer off the Southwest vein of which mention was made in last year's report, was driven on at the Upper 150 level. This work, consisting of 178 feet, disclosed a moderate body of high grade ore as indicated in the ore reserves. This stringer, which has been named the Santa Gertrudis, is believed to have good future prospects. Owing to the proximity of the Southwest vein shaft the Santa Gertrudis can be quickly investigated at the Zero and Lower 100 levels. This work, however, is not contemplated in the coming year, but instead every effort will be made to drive southward at the Upper 150 level and also explore the territory above. The Santa Gertrudis is considered an important strike.

South San Miguel Group

The South San Miguel vein splits into several stringers or smaller veins near its present southern extremity and it also has one or two narrow branch veins off it. Though in the past some distinction was made amongst the more important stringers and branch veins, it has been decided, for greater convenience, to include all those under the general heading of "South San Miguel Group." The present ore reserves cover this group and they are greater by 9,000 tons than a year ago.

Preparatory work for stoping the territory above the Upper 150 level has been completed, therefore, should it become necessary to do so, an important tonnage can be mined from this section in the coming year. The ore mined in 1923 came from the Zero level and the Lower 100 level stopes.

Southwest Vein

The shaft from the Upper 150 level, in Block 72, was retimbered down to the Zero level and sunk 42 feet. Sinking the remaining 60 feet necessary to establish the new level, the Lower 100, will be concluded in the coming year. Drifting will then be started on the vein as there is reason to believe that much of the good grade ore stoped at the Zero level will extend down to the Lower 100.

Termopilas Vein

The crosscut driven off the Upper 150 Peña Blanca adit tunnel intersected this vein in the latter part of the year. The vein is narrow, rather broken up, and valueless at the point of intersection, but there is reason to believe that 200 feet or so above the Upper 150 level commercial ore will begin to be encountered. A raise has been started with this object in view.

West Vein

The plan to further explore the western extent of this vein was partly carried out in the past year, 211.5 feet of drifting and 171.5 feet of raising being done at the Upper 150 level. An ore body was encountered which, above the Upper 150 level, yielded 2,417 tons of good grade ore. The remarkable feature is that its ratio of gold to silver was very much higher than is the case in any other part of the West vein. No work has as yet been done below the Upper 150 level. It is believed this ore will extend to a greater depth than is usual in other sections of this vein and in the coming year it is proposed to sink a winze from the Upper 150 level to determine this.

Veins Not Worked in 1923

The veins in which no work was done in the past year are the Capitana, Socorro, Nueva, North San Miguel and Concepción, Crisanta, Jucuara, Porvenir and Guadalupe. Each has ore in reserve and in prospect which will be mined when necessary. It is possible that in carrying out the general policy of increasing the yearly gold output, work will be resumed in the very near future in the Capitana, Nueva and North San Miguel and Concepción veins.

FUTURE DEVELOPMENT

Most of the recommendations noted under this heading in the 1922 report were acted upon during 1923 and some already have met with excellent success.

Thus continuation of the Esperanza Crosscut resulted in intersection of the Independencia vein last September and in which it is already possible to show a very substantial reserve of ore, averaging highest in value of any in the mine. The future of this vein is very promising and its full development should proceed without delay.

Development to the northwest on the Carmen, Fortuna and Salvador veins has been suspended over two years owing to these veins in this direction having either become impoverished or narrow.

The Porvenir vein should be explored above its present workings as chances for encountering ore are believed to be good.

The Esperenza crosscut has intersected in the past year and in previous years, stringers, some of which, though of no stoping importance at the point of intersection, nevertheless show some promise. Considering that in this mine even the best veins narrow to nearly valueless stringers, continuing this way over considerable distances, investigation of the stringers referred to is of greatest importance as some of them may be only the narrow and poor sections of very valuable veins.

The Esperanza crosscut should be continued in more or less its present course as the territory ahead seems to be promising. Before any change in direction is made, the surface above and ahead of the crosscut should be carefully prospected.

Exploration recommended of the stringer in the foot wall of the Southwest vein resulted in finding a substantial body of high grade ore. This stringer, which has been named the Santa Gertrudis vein, has good future prospects and should be developed, not only southward and above the Upper 150 level, but also at the Zero and Lower 100 levels, as there is good reason to believe ore will extend to these depths.

The crosscut at the Upper 150 level to intersect the Termópilas vein was driven, as planned, and this vein encountered. While no ore of commercial value was found at this level and the vein is narrow and very irregular, it is believed that at a higher elevation, 200 feet or so above the Upper 150 level, pay ore carrying more than average proportion of gold will be found.

The advisability of driving a crosscut from the surface to explore territory south of the present workings was looked into. A crosscut is recommended at the elevation of the Upper 150 level which will serve two purposes, first to connect with the present Porvenir vein heading, thereby decreasing the distance into the Esperanza country by about 2,500 feet, second, to explore the southern extension of the Culebra and South San Miguel veins, and one or two other veins cropping at the surface.

The Jucuara vein should be explored above and below the Upper 150 level in the coming year. About 40 feet northeast of the Jucuara there is a promising looking stringer on which some work has already been done. This stringer should be investigated further when work in the Jucuara vein is in progress.

In the other sections of the Mine, where at the present time there is little or no work, there are likely looking prospects fully warranting doing work on. Of these, perhaps one meriting first consideration is driving further the northwest and southeast headings of the San Joaquin vein at the Lower 300 level, as the territory ahead of each has ore possibilities.

Labor and probable power shortage will prevent many of these recommendations being carried out in the coming year, but as much in this regard will be done as circumstances permit.

MINE EQUIPMENT

Air Compressor Plant

The two Ingersoll-Rand air compressors, each of 2,120 cubic feet per minute capacity, installed in 1909, continued to render excellent service throughout the year. Owing to discontinuance of all night work underground and consequently heavier drilling operations on the day shift, the present compressor plant was found at times inadequate. To overcome this, the purchase of a 1,000 cubic feet per minute compressor was decided upon and it is expected that this unit will be installed some time in the coming year.

Drilling Equipment

Some replacements and additions to drilling equipment were made during the year and this is now in fair condition. Investigation of stoping drills best suited to conditions of this mine was continued during the year but did not develop into anything definite.

Pipe Lines

Increasing loss of air pressure at the drills due to increasing distances of these from the compressors and need of more air in certain sections of the mine makes it necessary to replace some of the main pipe lines with others of larger diameter. This replacement work was started during the year and it is proceeding as rapidly as operating conditions permit. When the Porvenir crosscut connects with the Esperanza crosscut the main piping into the Esperanza country, at present 8,500 feet in length, will be reduced by nearly 2,500 feet.

Haulage

The Upper 150 and Lower 650 level electric haulage systems underwent considerable repair work in the year past. Much of this still remains to be done and it is proceeding as rapidly as the lack of experienced labor permits.

On the hand haulage the track has been widened from 16 inches to 18 inches guage on some of the levels. On these levels a standard one man car has been adopted with the result that a moderate saving in tramming costs is noted.

Mine Blacksmith & Machine Shops

Investigation seems to indicate that an important saving will result if producer gas, instead of charcoal, is used in heating drill steel. In the coming year, therefore, a small, experimental gas producer will be purchased and actual tests made to determine if the purchase of a full capacity unit is warranted.

THE MILL

Tonnage Crushed

	1923	1922
Total wet tons received	98,862	79,471
Average percent moisture	11.0	12.8
Total dry tons milled	87,900	69,470
Average tons per day milled (365 days)	240	190
Average tons per day milled, full running time (283.02 days)	310	
Average tons per day milled, full running time (211.72 days)		328
Average tons per day milled, per 1850 lbs. stamp	15.5	16.4
Number of 1850 lbs. stamps	20	20
Total tons crushed by present mill	1,187,148	

Recovery

	1923	1922
Average ounces silver received per ton	25.894	23.494
Total ounces silver received	2,276,082	1,632,128
Average ounces silver recovered per ton	23.146	20.851
Total ounces silver recovered	2,034,492	1,449,899
Average silver recovery, per cent	89.39	88.84
Average ounces gold received per ton	.0612	.0684
Total ounces gold received	5,379	4,752
Average ounces gold recovered, per ton	.0571	.0627
Total ounces gold recovered	4,679	4,357
Average gold recovery, percent	93.30	91.79

THE MILL

Supplies Used

	1923 Per Ton Ore Crushed Tonnage 87,900	1922 69,470	1923 Per Oz. Fine Bul'n Produced Grade of Ore Ag. 25.894 Au. .0612	1922 Ag. 23.494 Au. .0684
Cyanide, 96-98%	1.716 lbs.	4.786 lbs.	.073965 lbs.	.228621 lbs.
Cyanide, 48%	5.869 "	.....	.252971 "	.....
Cyanide, 37-41%	0.0364 "	0.023 "	.001569 "	.001095 "
Zinc Dust	1.052 "	1,030 "	.045356 "	.049193 "
Muriatic Acid	0.0862 "	.063 "	.003715 "	.003023 "
Lime 100%	14.715 "	12.302 "	.634306 "	.587668 "
Borax	0.0633 "	.041 "	.002729 "	.001960 "
Soda	0.0292 "	0.021 "	.001258 "	.000985 "
Fuel Oil	0.0872 gal.	0.070 gal.	.003760 gal.	.003325 gal.
Artificial Pebbles	96.656 lbs.	68.657 lbs.	4.166448 lbs.	3.279750 lbs.
Foreign Pebbles	1.751 "	2.762 "	.075500 "	.131938 "
Fluorspar	0.0046 "	.....	.000198 "	.....

Total Milling Costs

	Total Cost (U.S.C.) 1923	1922	Cost per Ton (U.S.C.) 1923	1922	Cost per Ounce Fine Bullion Produced 1923	1922
Labor	$45,971.00	$38,055.00	$ .52	$ .55	$.0225	$.0261
Supplies	176,890.00	162,583.00	2.01	2.34	.0868	.1118
Power	11,441.00	8,675.00	.13	.12	.0056	.0060
Total U. S. Cy.	$234,302.00	$209,313.00	$2.66	$3.01	$.1149	$.1439

	1923	1922
Tons crushed	87,900	69,470
Fine ounces bullion produced	2,039,171	1,454,257

Recovery

Comparison of last year's value recovery with that of 1922 shows better recovery of silver by 0.55% and of gold, by 1.60%. This is due, as shown in the comparative figures above, to better extraction and decrease in soluble value losses of both metals.

Continuous operation of the Merrill Slime Presses entails a certain loss of rich solution by leakage, and such loss represents important figures both in values and in cyanide when rich ore is treated and the press discharge valves and other parts become worn. In the latter part of the year improvements were made whereby over 75% of such leakage is returned to the mill circuit instead of going to waste with the tailings.

About the same character of ore as that treated in the year past is looked for. Nevertheless, even a better recovery of silver is expected when, early in the coming year, finer grinding will be possible upon installation of a 4 ft. x 10 ft. ball tube mill.

Precipitation

During 1923 one pound of zinc dust precipitated 22.05 ounces fine bullion as compared with 20.33 ounces in 1922. The Crowe Vacuum Process was used throughout the year with good success. Experiments were made with several classes of zinc dust and a grade adopted which, it is believed, will return maximum results at minimum cost.

Sampling

The mill has never been equipped with a mechanical sampler, therefore, sampling the daily ore receipts is being done by hand in taking a shovelful of the ore at certain intervals as this passes from the mill ore bin into the stamp batteries. Since milling coarser ore commenced, due to the grizzly bar spacing having been increased from 1¾ inches to 3 inches, it was often found impossible to get a fairly accurate final sample due to difficulty of accurately quartering the coarser ore in the sample. To overcome this, a sampling house was built and equipped with the necessary machinery where the sample is now reduced to a fineness consistent with accurate work.

Cyanide

As a result of tests under average working conditions a 48-50% brand of cyanide was substituted for 96-98% sodium cyanide and used exclusively during the second half of the year. The low grade cyanide effects the same extraction as the higher grade, though in somewhat longer time, this being due it is thought, to greater viscosity of the solutions. As the low grade cyanide is appreciably cheaper, its use is to be recommended while daily milling tonnages and the class and grade of ore are such as to permit the full period of agitation. In event of milling larger daily tonnages of the same kind of ore, which would proportionately reduce the period of agitation, it would be probably found advisable to revert to the high grade cyanide so that silver extraction would not suffer. Or to increase the agitation capacity of the plant accordingly if the use of low grade cyanide is to be continued.

Refining

To assure greater security against loss, foreign labor was employed exclusively in the refinery during the year. The present bullion vault being at times found too small to take care of both Doré bars and precipitates, it will be enlarged in the coming year.

The cost of producing one Doré bar from cyanide precipitates was $9.36 as compared with $10.08 in the previous year.

The possibility of more advantageous disposal of the product in the form of cyanide precipitates instead of Doré bars is being investigated. If an important saving can be expected the product will then be shipped as cyanide precipitates.

Mill Machinery

It should be realized that electrical and other machinery of the Mill, having been in continuous use over 11 years and under operating conditions which over a long period entailed almost, if not a record percentage of running time, is showing markedly the signs of wear. Repairs and replacements were promptly and efficiently made throughout the year, but in the near future it is probable entire units will have to be replaced. While upkeep could, of course, be continued indefinitely, the policy is not to carry this to a point beyond where its cost and capacity curtailment of the mill would exceed the expense of entire replacement.

Tanks

The deteriorated condition of all the steel cyanide tanks was emphasized in the 1922 report. Some of the most urgent repairs were made in the past year, but this work, which consists mostly of electric welding, has been much retarded due to insufficient capacity of the present welding machine. A larger machine has been ordered and when put in use these tank repairs will proceed at a much greater rate.

Metallurgical Improvements

A process, holding out the possibility of reclaiming most of the cyanide at the present time going to waste with the mill tailings and which also, by decreasing the viscosity of the solutions would tend towards an increased silver extraction, is being thoroughly investigated. This process could be readily added to the present mill flow sheet and it will be adopted as soon as further proofs of its efficiency are obtained. The saving effected would be a very important one.

HYDRO-ELECTRIC POWER PLANTS

San Juancito Plant

Static Head:	1,355 feet.
Pipe Line:	4,739 feet of 20″, 17″ and 14″ pipe.
Equipment:	2—350 KVA, 6600 volts, 60 cycles, A. C. Generators, each coupled directly to a 600 H.P. Pelton Wheel.

Flume Lines:	The Escobales and Aguacatal: built of wood, total length, 17,000 feet.
Output in 1923:	3,276,960 kilowatt hours, representing 60% of total power produced.

The San Juancito Plant, while rendering efficient service throughout the year, needs overhauling. One of the Pelton wheels is in need of immediate repairs which will be effected in the dry season.

The flume lines serving the plant have undergone considerable repairs in the past year. At a moderate upkeep cost they are good for several years to come.

Guadalupe Plant

Static Head:	490 feet.
Pipe Line:	2,350 feet of 20" pipe.
Equipment:	2—350 KVA—6600 volts, 60 cycles, A. C. Generators, each directly connected to a 450 H.P. Pelton Wheel.
Flume Lines:	The Guadalupe, 6,000 feet in length, new.
Output in 1923:	2,162,140 kilowatt hours, representing 40% of total power produced.

The Guadalupe Plant produced about three times more power than in the year previous and this was made possible by the new and larger flume.

Power Plant Improvements

The question of alterations to both plants with a view to better efficiency and greater water economy, is being looked into. It is quite possible that in the coming year some decision in this regard will be made.

Reservoir

Excavation of a reservoir for the San Juancito Plant of approximately 120,000 cubic feet capacity was concluded last December. Lining with concrete should be finished in the early part of the coming year.

On a full load water consumption and entry of water from both flumes cut off, this reservoir should hold the San Juancito Plant at full load about three and one-half hours as against about two minutes with the present wooden tank.

Transmission Lines

The 23,000 feet of high voltage transmission lines were kept in good condition, though many poles had to be changed during the year. The advisability of placing these lines on steel towers will be looked into because, though the first cost may be large, it would soon be compensated by much lower upkeep cost.

The following comparative statement shows distribution of power used and its cost:

POWER DISTRIBUTION

	Kilowatt Hours 1923	K.W. Hours per ton 1923	Kilowatt Hours 1922	K.W.Hours per ton 1922
Mine Power	1,666,627	18.960	1,340,523	19.296
Electric Haulage	217,565	2.475	171,053	2.462
Mine Lights	10,878	.125	15,961	.230
Mill Power	3,337,354	37.968	2,552,291	36.739
Mill Lights	27,196	.309	22,657	.326
Surface Lights	27,196	.309	24,331	.350
Surface Power	108,782	1.237	84,763	1.220
Machine Shop	27,195	.309	23,214	.334
Laboratory	16,317	.186	13,627	.196
Totals	5,439,110	61.878	4,248,420	61.153
Increase	1,190,690			
Cost per Kilowatt Hour	$.00340		$.00347	
Decrease	.00007			

Based on horsepower generated, we show:

	1923	1922
Horsepower Hours	7,291,031	5,694,932
Cost per Horsepower Hour	$ .00253	$ .00259
Cost per Horsepower Year	$ 2.215	$ 2.268
Decrease	$ .053	

San Juancito Power Plant produced	3,276,970 kilowatt hours	60%
Guadalupe Power Plant produced	2,162,140 "	" 40%
	5,439,110 "	"

Rainfall

	1923	1922	1921
Total rainfall, inches	47.12	59.35	70.82
Number of days during which rain fell	164	153	193
Greatest rainfall in one month	13.24 June	11.08 June	15.59 June
Greatest single rainfall	2.09	4.78	4.00

The material decrease in rainfall, as compared with a normal year such as 1921, was very much felt in 1923, because operations, as compared with those of 1922, were on a considerably larger scale. The past two years are looked upon as abnormal ones, otherwise it would be advisable to increase the power supply by dropping one of the present power plants about 500 feet lower to get correspondingly more power from the same water supply.

MECHANICAL DEPARTMENT

The Mechanical Department was able to handle the increasing number of repairs to equipment promptly. A larger electric welding set has been ordered and when installed, repair work on tanks, pipe lines and other equipment should proceed at a much better rate.

The installation of a foundry was fully considered and decided upon. Excavation of a convenient site has already commenced and it is expected that in the latter part of the coming year the casting of such supplies as tube mill liners, battery shoes and dies, and steel balls for the tube mills, will commence. For this purpose there is an accumulation of many years of scrap material.

The present machine shop building, being inadequate both from the standpoint of space and proper foundations for some of the machine tools, it is proposed to erect a new building of more convenient dimensions, more advantageously situated and where better foundations are assured. Preliminary work with this end in view has already commenced. The intention is to use the present machine shop building for the storage of foundry product and heavy mill machinery parts.

Assay Office and Laboratory

	1923	1922
Total number assays run	20,123	14,652
Average number assays per day	55	40
Average cost per assay	$ 0.34	$ 0.41

The work of this department was up to standard in accuracy. If necessary, the number of daily assays could be considerably increased without additions either to personnel or equipment.

Medical Department

	1923		1922	
	Foreign	Native	Foreign	Native
Number of treatments	238	4121	251	3554
Total number of treatments	4359		3805	
Cost of maintenance	$4,988.00		$6,074.00	
Decrease	$1,086.00			

The general public health in this immediate vicinity was good and there were no epidemics of any sort.

Under its franchise from the Honduran Goxernment the Company is permitted to make a deduction of 2% from the earnings of each employee, foreign or native, in lieu of which it must render medical and hospital service free. Up to the present time the Company has not exercised this right and not only has medical and hospital service been free to all employees and their immediate families, but a nominal sum as a sick benefit has been paid to all native employees who, due to injury while on duty, are temporarily unable to work.

The present general policy is that so long as the Company is operating at a profit it should not exercise this franchise right. Only in the event of special circumstances which might make the maintenance cost of the Medical Department considerably larger than it is at the present time would this right be enforced.

Other Departments

Hotel

	1923	1922
Total number of meals served	27,939	27,432
Cost per meal	$ 0.54	$ 0.48

Schools

Average daily attendance during year

Boys' School	83	84
Girls' School	74	92
Total Expense	$ 6,860.00	$ 5,900.00
Increase	960.00	

Police and Garrison

Total expense	$11,187.00	$10,728.00
Increase	459.00	

Average number of officers and soldiers for the year 1923 about the same as last year, viz., about 60.

Roads

Total expense	$ 1,820.00	$ 1,341.00
Increase	479.00	

Agencies

Total expense	$ 3,124.00	$ 3,905.00
Decrease	781.00	

EXPANSION

Sabana Grande Honduras Mining Company

Mill construction was concluded in March and production of flotation concentrates commenced in April. Owing to cheaper fuel oil supply and other improvements it has been possible to average a moderate monthly operating profit.

The following is a statement of the 1923 production, approximate costs and other statistical information:

	1923
Tons Milled	7,869
Average Ounces Silver per Ton	32.47
Average Ounces Gold per Ton	.171
Ounces Silver Produced	200,953
Ounces Gold Produced	976
Silver Recovery, %	78.55
Gold Recovery, %	72.53
Feet Development Driven	1,900
Honduras Operating Cost per Ton, U.S.C.	$9.89

The somewhat low recovery of silver and gold is due principally to treatment of semi-oxidized ore coming from a surface stock pile and stopes near the surface. In the coming year better recoveries are anticipated.

Ore reserves continue to be maintained at a figure sufficient for three to four months full milling operations, or in the neighborhood of 5,000 tons averaging 30.00 ounces silver and 0.15 ounces gold. The probabilities are that during 1924 sufficient ore will be found to maintain the 1923 monthly production average.

Moramulca Prospect, Moramulca, Department of Choluteca

Title was obtained to 90 hectares of ground and a small amount of work started on the most likely of the five or six existing veins.

This property is very conveniently located as regards cheap land transportation and there are possibilities of water power not a great distance away. Therefore, any ore found would not have to be exceedingly high in grade to yield a profit.

Provisional title to 1,000 hectares is to be acquired in the coming year provided prospect work indicates that this is warranted.

Moloncosa Prospect, El Corpus, Department of Choluteca

Title was obtained to 17 hectares of ground and driving of two tunnels started to prospect a 25 foot quartz dyke to determine if this is uniformly gold bearing and of a workable grade. It will take a year or more to learn if this property has possibilities.

Other Prospects

During the coming year the plan is to continue looking for likely looking prospects.

Governmental

Relations with the Government of Honduras continued to be on a most friendly footing and thanks are due to his Excellency, the President, General Rafael López Gutiérrez and the members of his cabinet for many courtesies.

Concession

In the middle of the year the installation of an aqueduct and distributing system for the Capital, Tegucigalpa, was concluded. This project was undertaken by the Company in compliance with one of its concession obligations, its extent and nature forming the basis of an agreement entered into with the Government. The installation is first class in every respect and in excess of specification requirements.

CONCLUSION

The outstanding accomplishment of the past year was the re-establishment of positive ore reserves, both as to tonnage and value, to figures approaching those of about ten years ago.

The 1923 silver production is a record one. Given normal operating conditions, it should be equalled, if not exceeded in 1924, as ore reserves are sufficiently exposed to permit this.

No new gold bearing veins having been found for some time, efforts will be continued to increase the gold output by reworking, at a greater rate, some of the gold bearing veins which were big producers in former years.

The question of better value recovery from the ore continued to have full attention, with the result that a new record in percentage of silver recovery was established, though the ore now obtained is more difficult to treat as compared with that mined formerly. The percentage of gold recovered showed a marked improvement as compared with that of the year previous.

As in the year past, the policy of striving for better efficiency and more economical operation in all departments will continue. Such a policy necessitates frequent additions and replacements to equipment. Thus in the Mine Department an additional air compressor is to be installed, and in view of increasing labor shortage, mechanically operated shovels experimented with. The addition of a process to the present Reduction Works, holding out the possibility of a very considerable saving in cyanide, and perhaps a further increase in silver recovery, is being considered. It will be adopted if proof of its efficacy is available. All these improvements naturally increase the demand for greater power output from the two hydro-electric power plants. This contingency, however, has already been mostly taken care of in the construction of a large reservoir for the San Juancito plant, which is nearing completion. The question also of greater efficiency from both power plants, by modernizing some of the equipment of each, has been looked into. The possibilities are some changes will be made in the San Juancito plant. The establishment of a foundry, which it is expected will effect a considerable saving, has been decided upon and construction work has already commenced.

If it is felt that last year's work, reviewed in this report, is satisfactory, much the larger credit and thanks are due the Staff for the faithful service rendered and the Officers and gentlemen of the Board of Directors for their fullest support.

Very truly yours,

A. R. GORDON,
General Manager.

Annex "A"

Summary of Calculated Ore Reserve

(At 13 cu. ft. per ton)

	Av. Width Feet	Per Cent Waste	Tons of Ore & Waste	Ozs. Ag. per ton	Ozs. Au. per ton	Total Ozs. Ag.	Total Ozs. Au.
Carmen	1.7	55	14,500	25	.04	362,500	580
Culebra	1.5	40	23,000	15	.06	345,000	1,380
Fortuna	1.3	60	20,500	25	.03	512,500	615
Independencia	2.4	47	12,600	35	.06	441,000	756
Salvador	2.3	34	83,900	26	.03	2,181,400	2,517
Santa Gertrudis	2.2	50	6,000	27	.03	162,000	180
San Joaquin	1.0	60	9,500	15	.12	142,500	1,140
North San Miguel	1.6	35	4,800	15	.06	72,000	288
So. San Miguel and 2 stringers	1.4	50	31,500	16	.06	504,000	1,890
Southwest	2.1	30	6,500	20.5	.05	133,250	325
Totals		43	212,800	22.82	.045	4,856,150	9,671

Summary of Estimated Ore Reserves

(At 13 cu. ft. per ton)

Buenaventura	3,000	12	.06	36,000	180
Candelaria vein and stringer	5,000	12	.07	60,000	350
Capitana	3,000	10	.13	30,000	390
Catalina	1,500	13.5	.05	20,250	75
Colonia	3,000	13.5	.07	40,500	210
Esperanza	1,500	15	.05	22,500	75
Guadalupe	1,000	12	.03	12,000	30
Jucuara	2,000	12	.05	24,000	100
North	1,000	14	.05	14,000	50
Northwest	6,000	14.5	.06	87,000	360
Nueva	1,500	12	.05	18,000	75
Porvenir	2,000	13	.05	26,000	100
Rosario	7,000	12	.06	84,000	420
Socorro	1,000	14	.05	14,000	50
West	2,000	13	.04	26,000	80
Totals	40,500	12.69	.0628	514,250	2,545

Summary of Estimated Stope Filling

(At 17 cu. ft. per ton)

Candelaria	3,000	10	.04	30,000	120
Guadalupe	2,000	10	.03	20,000	60
Rosario	2,500	10	.04	25,000	100
West	1,500	10	.03	15,000	45
Totals	9,000	10	.036	90,000	325

Summary of Broken Ore in Stopes

(At 21 cu. ft. per ton)

Total	19,953	20	.04	399,060	798

Total Summary

Calculated Ore	212,800	22.82	.0454	4,856,150	9,671
Estimated Ore	40,500	12,697	.0628	514,250	2,545
Estimated Stope Filling	9,000	10	.036	90,000	325
Broken Ore in Stopes	19,953	20	.04	399,060	798
Totals	282,253	20.759	.0472	5,859,460	13,339

Average metal content per ton at Mill—Silver 20.759

Gold ..... .0472

Annex "B"

BROKEN ORE IN STOPES

December 31, 1923

(At 21 cu. ft. per ton)

Total by Veins

VEINS	Tons
Buena Ventura	400
Candelaria	1,310
Catalina	100
Colonia	300
Culebra	250
Fortuna	425
Independencia	248
North West	1,600
Rosario	2,353
Salvador	12,092
South San Miguel	75
Chute No. 8	500
Chute No. 51	150
Chute No. 36	150
TOTAL	19,953

Annex "C"

Development for Year 1923

	Drifts	Crosscuts	Raises	Winzes	Total Feet
Buena Ventura	12.0	....	32.0	....	44.0
Carmen	16.0	38.5	124.5	....	179.0
Carmen Extension	161.0	....	....	....	161.0
Candelaria	435.5	70.5	53.5	....	559.5
Colonia	6.0	....	77.0	....	83.0
Culebra	250.0	137.0	375.5	....	762.5
Esperanza Stringer	219.0	....	35.0	....	254.0
Esperanza Crosscut	283.5	11.0	....	....	294.5
Fortuna	207.5	5.0	....	....	212.5
Guadalupe Stringer	52.5	....	....	....	52.5
Independencia	231.5	.....	.....	.....	231.5
Matraca	44.0	3.0	.....	.....	47.0
North Hilo	8.0	.....	.....	.....	8.0
North West	232.0	129.5	185.0	....	546.5
Nuevo	7.5	.....	.....	.....	7.5
Rosario	162.5	43.5	511.0	.....	717.0
Salvador	1970.0	307.0	622.5	.....	2899.5
South San Miguel	115.5	14.0	188.5	....	318.0
South San Miguel Hilo	177.5	172.5	161.0	....	511.0
San Miguel N. W. Crosscut	277.5	.....	.....	.....	277.5
South West	....	26.5	.....	42.0	68.5
South West Stringer	167.0	.....	11.0	.....	178.0
Termopilas	519.0	116.0	9.0	....	644.0
West	211.5	15.5	171.5	.....	398.5
TOTALS	5766.5	1089.5	2557.0	42.0	9455.0

Annex "D"

ORE PRODUCTION 1923

(Dry Tons)

VEINS	From Stoping Operations Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	TOTALS FROM Stoping	Dev.	Filling	Grand Total
Buena Ventura	367	89	157	55	.....	.....	12	11	.....	.....	.....	.....	691	.....	.....	691
Candelaria	.....	.....	.....	.....	.....	43	131	120	227	238	222	206	1,187	322	126	1,625
Carmen	279	297	277	332	399	230	379	347	203	329	363	307	3,742	41	.....	3,783
Colonia	.....	.....	.....	.....	.....	40	11	.....	59	31	.....	.....	141	28	.....	169
Culebra	1,384	1,597	1,650	1,684	1,811	2,413	1,750	1,507	995	948	1,021	583	17,343	334	.....	17,677
Esperanza Str.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	397	.....	397
Fortuna	229	16	166	15	61	34	7	.....	.....	.....	10	114	652	254	.....	906
Guadalupe	13	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27	.....	176	203
Independencia	.....	.....	.....	.....	.....	.....	.....	.....	.....	49	28	106	183	729	.....	912
North West	167	302	351	304	267	257	419	567	630	476	423	701	4,866	206	341	5,413
Rosario	1,203	1,130	1,089	949	552	416	509	650	650	579	344	285	8,258	187	1,883	10,328
Salvador	2,258	2,511	2,642	2,442	2,157	2,306	2,745	3,445	3,367	3,342	3,931	4,328	35,474	4,281	.....	39,755
Santa Gertrudis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	507	.....	507
San Joaquin	81	52	50	25	72	87	256	11	.....	.....	.....	.....	634	.....	.....	634
S. San Miguel	54	.....	224	386	191	202	195	153	111	179	229	242	2,166	166	66	2,398
South West	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78	33	111
West	.....	.....	.....	.....	.....	22	244	210	198	177	206	159	1,216	798	403	2,417
Totals	6,035	6,008	6,606	6,192	5,510	6,186	6,566	6,880	6,440	6,349	6,777	7,031	76,580	8,328	3,028	87,936
From Development	425	246	520	872	641	616	320	674	1,465	865	858	826	.....	8,328	.....	.....
From Stope Filling	246	.....	7	296	71	11	429	496	496	385	285	306	.....	.....	3,028	.....
GRAND TOTAL	6,706	6,254	7,133	7,360	6,222	6,813	7,315	8,050	8,401	7,599	7,920	8,163	.....	.....	.....	87,936

Summary

Total Production from Stoping Operations	76,580
Total Production from Development Operations	8,328
Total Production from Stope Filling	3,028
GRAND TOTALS	87,936

Annex "E"

Tonnage Mined from October 1, 1907 to January 1, 1924

VEINS	Total including Stoping, Devel. & Filling Oct 1/07 to Dec. 31/22	Total including Stoping, Devel. & Filling Year 1923	Grand Total including Stoping, Devel. & Filling January 1, 1924
Buena Ventura	94,740	691	95,431
Candelaria	156,282	1,635	157,917
Capitana	52,945	....	52,945
Carmen	8,995	3,783	12,778
Catalina	2,347	....	2,347
Colonia	51,759	169	51,928
Concepción	19,170	....	19,170
Crisanta	7,410	....	7,410
Culebra	39,485	17,677	57,162
Esperanza	8,269	397	8,666
Fortuna	3,658	906	4,564
Guadalupe	60,672	203	60,875
Independencia	.....	912	912
Jucuara	2,207	....	2,207
North	4,006	....	4,006
Northwest	65,130	5,413	70,543
Nueva	27,846	....	27,846
Porvenir	959	....	959
Rosario	124,981	10,328	135,309
Salvador	13,913	39,755	53,668
Santa Gertrudis	.....	507	507
San Joaquin	62,396	634	63,030
San Miguel (stringer)	2,625	....	2,625
San Miguel (north)	174,801	....	174,801
San Miguel (south)	84,908	2,398	87,306
Socorro	19,810	....	19,810
Southwest	18,761	111	18,872
West	94,058	2,417	96,475
Ore from Development	63,599	....	63,599
Miscellaneous	715	....	715
Totals	1,266,447	87,936	1,354,383

Summary

October 1, 1907 to January 1, 1924

From Stoping	1,051,537
From Development	71,927
From Filling	230,919
Total	1,354,383

Condensed Balance Sheet

New York & Honduras Rosario Mining Company—

New York City

December 31, 1923

ASSETS

Permanent—			
Mines, Real Estate and Concessions		$3,000,000.00	
Plant, Buildings, Machinery and Equipment	$1,267,969.94		
Less: Allowance for Depreciation	737,431.10		
		530,538.84	
			$3,530,538.84
Current—			
Cash		37,094.80	
Loans Receivable plus Interest		437,524.92	
Bullion at Smelters and in Transit at Market— Less: Allowance for Expenses		307,156.61	
Broken Ore in Stopes and Mill Bins at Cost		88,245.59	
Materials and Supplies at Cost		210,782.15	
U. S. Liberty Bonds at Market plus Interest		206,845.35	
Foreign Government Bonds at Market plus Int.		50,499.94	
Domestic Railroad Bonds at Market plus Int.		189,657.32	
Domestic Industrial and Public Utility Bonds at Market plus Interest		99,236.69	
			1,627,043.37
Other Assets—			
Investments—Capital Stock of other Companies		51,853.00	
Advances to other Companies—Less: Allowance for Shrinkage		103,093.82	
Miscellaneous Accounts Receivable		4,724.51	
			159,671.33
Deferred Charges—			
Prepaid Insurance, Taxes and Expenses			152,875.60
TOTAL ASSETS			$5,470,129.14

LIABILITIES

Current—			
Drafts Payable		$ 24,703.09	
Accounts Payable		17,274.59	
Federal Income and Profits Taxes, prior years (Estimated)		123,301.99	
Federal Income Tax, 1923		39,873.09	
			$ 205,152.76

Reserves—			
Mine Fire Insurance		38,313.49	
Transit Insurance		7,959.51	
Depletion of Mines		1,385,479.66	
Dividends Payable (January, 1924)		50,000.00	
			1,481,752.66
Capital Stock—			
Authorized and Issued—200,000 Shares Par Value of $10.00 per Share		2,000,000.00	
Surplus—			
Appreciation of Mine Valuation—			
Less: Depletion	$ 958,543.03		
Earned Surplus	824,680.69		
		1,783,223.72	
			3,783,223.72
			$5,470,129.14

Income and Profit and Loss Statement

New York & Honduras Rosario Mining Company

New York City—For the year ended December 31, 1923

Production of Gold and Silver		$1,421,911.15	
Less: Freight and Expenses on Bullion		54,029.74	
Operating Income			$1,367,881.41
Deduct: Operating Expenses			713,782.52
Operating Profit			$ 654,098.89
Deduct: New York Administrative Expenses			51,325.17
Net Income from Operations			$ 602,773.72
Other Income			47,950.37
			$ 650,724.09
Other Deductions from Income			23,523.08
Net Profit Before Federal Income Tax and Provision for Reserves			$ 627,201.01
Federal Income Tax			39,873.09
Net Profit for Year			$ 587,327.92
Appropriated for Reserves—			
Reduction of Bonds to Market Valuation at December 31, 1923	$	1,095.63	
Mine Fire Insurance		5,308.72	
Transit Insurance		2,799.57	
Ore Depletion		190,751.05	
			199,954.97
Profit for Year Carried to Surplus			$ 387,372.95

Surplus—			
Surplus, January 1, 1923			$1,696,840.90
Deductions—			
Shrinkage in Market Value of Liberty Bonds at Dec. 31, 1923	$ 990.13		
Dividends Paid	$250,000.00		
Dividends Provided	50,000.00		
	$300,000.00	$300,990.13	$1,395,850.77
Surplus—December 31, 1923			$1,783,223.72

Auditors' Certificate.

WE HEREBY CERTIFY that we examined the books of account and record of the NEW YORK AND HONDURAS ROSARIO MINING COMPANY, NEW YORK CITY, for the year ended December 31, 1923, and, subject to the fact that we did not examine the records of the Mine Office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial position of the Company at December 31, 1923, and that the related Income and Profit and Loss Statement is correct.

Very truly yours,

(Signed) ERNST & ERNST.

(Seal)

New York & Honduras Rosario Mining Company

Comparative Statement of Net Assets

FOR THE YEARS ENDED DECEMBER 31st AS BELOW

	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
CURRENT ASSETS—											
Cash and Cash Items	$106,866	$90,618	$114,159	$259,461	$414,773	$361,399	$172,165	$470,377	$283,570	$308,423	$474,620
Marketable Securities	.....	.....	.....	.....	100,791	323,500	208,800	179,822	408,485	564,611	546,239
Bullion in Transit	207,438	252,348	271,735	353,116	325,260	387,348	805,137	231,770	1,145	142,270	307,157
Ore in Stopes and Mill Bin	89,078	96,885	99,952	122,873	121,172	112,126	95,134	120,978	114,217	91,467	88,245
Materials and Supplies	250,469	272,807	292,732	300,761	427,909	401,343	329,101	403,393	308,464	191,772	210,782
Total Current Assets	$653,851	$712,658	$778,578	$1,036,211	$1,389,905	$1,585,716	$1,610,337	$1,406,340	$1,115,881	$1,298,543	$1,627,043
Deduct: Current Liabilities	91,344	71,139	59,027	257,499	567,784	694,372	522,062	199,069	218,387	218,305	205,153
Net Current Assets	$562,507	$641,519	$719,551	$778,712	$822,121	$891,344	$1,088,275	$1,207,271	$897,494	$1,080,238	$1,421,890
OTHER ASSETS—											
Accounts Receivable, Investments, Deferred Charges, etc.	42,277	43,330	43,727	170,019	250,098	237,026	368,378	144,173	178,546	269,179	312,547
PERMANENT—											
‡Mines, Real Estate, Concessions, Buildings, Machinery, etc. (less Allowances for Depreciation)	2,415,197	2,371,513	2,352,400	2,308,444	2,062,112	2,213,070	2,188,829	2,134,275	2,116,892	2,080,317	2,030,539
*Total Net Assets	$3,019,981	$3,056,362	$3,115,678	$3,257,175	$3,134,331	$3,341,440	$3,645,482	$3,485,719	$3,192,932	$3,429,734	$3,764,976
Increase of Net Current Assets over Preceding Year	.....	$79,012	$78,032	$59,161	$43,409	$69,223	$196,931	$118,996	†$309,777	$182,744	$341,652
Increase of Net Current Assets over December 31, 1913	.....	$79,012	$157,044	$216,205	$259,614	$328,837	$525,768	$644,764	$334,987	$517,731	$859,383

* Represented by Capital Stock, Surplus, Reserves for Depletion, Exchange Fluctuation, Contingencies, etc., with no adjustment for increased valuation of mines, etc.

† Decrease

‡ Not adjusted for increased valuation of mines.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
	$32,843,397.84

Distribution to Stockholders

1887 No. 1	$37,500— 2½%	Dividend
1888 Nos. 2 to 5	60,000— 4%	Dividend
1889 Nos. 6 to 14	150,600—10%	Dividend
1891 Nos. 15 to 16	30,000— 2%	Dividend
1892 Nos. 17 to 21	165,000—11%	Dividend
1893 Nos. 22 to 25	150,000—10%	Dividend
1894 No. 26	37,500— 2½%	Dividend
1896 Nos. 27 to 28	30,000— 2%	Dividend
1897 Nos. 29 to 40	180,000—12%	Dividend
1898 Nos. 41 to 48	120,000— 8%	Dividend
1899 Nos. 49 to 60	180,000—12%	Dividend
1900 Nos. 61 to 75	225,000—15%	Dividend
1901 Nos. 76 to 93	300,000—20%	Dividend
1902 Nos. 94 to 100	105,000— 7%	Dividend
1903 No. 101	15,000— 1%	Dividend
1904 Nos. 102 to 108	105,000— 7%	Dividend
1905 Nos. 109 to 121	180,000—12%	Dividend
1906 Nos. 122 to 139	285,000—19%	Dividend
1907 Nos. 140 to 153	210,000—14%	Dividend
1908 Nos. 154 to 165	180,000—12%	Dividend
1909 Nos. 166 to 173	120,000— 8%	Dividend
1910 Nos. 174 to 180	105,000— 7%	Dividend
1911 Nos. 181 to 182	90,000— 6%	Dividend
1912 Nos. 183 to 184	70,000— 3½%	Dividend
1913 Nos. 185 to 188	180,000— 9%	Dividend
1914 Nos. 189 to 193	240,000—12%	Dividend
1915 Nos. 194 to 197	240,000—12%	Dividend
1916 Nos. 198 to 205	400,000—20%	Dividend
1917 Nos. 206 to 211	300,000—15%	Dividend
1917 No. 1	100,000— 5%	Amortization
1918 Nos. 212 to 215	200,000—10%	Dividend
1918 Nos. 2 to 5	200,000—10%	Amortization
1919 Nos. 216 to 219	200,000—10%	Dividend
1919 Nos. 6 to 9	200,000—10%	Amortization
1920 Nos. 220 to 225	320,000—16%	Dividend
1920 Nos. 10 to 11	80,000— 4%	Amortization
1921 No. 226	60,000— 3%	Dividend
1922 Nos. 227 to 229	150,000— 7½%	Dividend
1923 Nos. 230 to 234	250,000—12½%	Dividend
Total	**$6,250,000**	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 234, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of ... 2,000,000.00

OCT 19 1934

REPORT of the

NEW YORK & HONDURAS ROSARIO MINING CO.

1924

NEW YORK

January 1, 1925

OFFICERS 1925-1926

LEWIS L. CLARKE, *President.*
H. A. GUESS, *Vice-President.*
A. R. GORDON, *Vice-President.*
W. C. LANGLEY, *Treasurer.*
J. PERLMAN, *Secretary.*

BOARD OF DIRECTORS 1925-1926

WM. A. PRENDERGAST, *Chairman.*

SIDNEY ABBEY,
LEWIS L. CLARKE,
H. A. GUESS,
IRVING HEIDELL,
DR. J. RALPH JACOBY
W. C. LANGLEY,
W. L. SAUNDERS,
E. V. SOTO,
AMBROSE G. TODD,
DR. JULIUS J. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITTEE 1925-1926

WM. A. PRENDERGAST, *Chairman.*

SIDNEY ABBEY,
H. A. GUESS,
W. L. SAUNDERS,
AMBROSE G. TODD,
P. R. WEILER

LEWIS L. CLARKE
W. C. LANGLEY
} *Ex-Officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company

New York, January 1, 1925.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

It is a great pleasure to report to you that 1924 *was one of the most satisfactory years in the history of the Company. We again established a new high record of production which was* 2,189,903.69 *ounces of silver, or an increase over the next highest record* (1923) *of* 151,692.84 *ounces.*

The good results of the year were achieved despite an interruption in operations lasting almost two months, due to the unsettled political conditions in Honduras. These conditions rendered the movement of freight impossible for a time, and we were therefore unable to keep the property equipped with adequate supplies.

While general operations were suspended, the time was employed in making essential repairs to, and renovations in, the property.

I am pleased to present to you the following facts covering some of the most important items of our operations for the past year, with a comparison of the same items for the preceding year:

	1924	1923
Dry tons treated	75,710.	87,900.
Ounces silver produced (Smelter's final returns)	2,189,903.69	2,038,210.85
Ounces gold produced (Smelter's final returns	4,339.234	4,681.21
Bars Doré Bullion	1,455	1,338
Drums Precipitates	4	....
Average silver recovery at Mine (per cent)	90.68	89.39
Average gold recovery at Mine (per cent)	94.61	92.64
Average ounces silver recovered at Mine (per ton)	28.886	23.146
Average ounces gold recovered at Mine (per ton)	.0585	.0532
Value of silver recovered (per ton)	$19.7452	$15.0756
Cost of Silver recovered (per ton)	$10.1643	$8.2181

Cost of Silver recovered (per ounce)	$.35140	$.35442
Net profit on Silver recovered (per ton)	$9.5809	$6.8575
Net profit on Silver recovered (per ounce)	$.33120	$.29573

The net Operating Income for the year was	$1,514,554.06
Less: Operating Expense	737,394.67
Operating Profit	777,159.39
Less: New York Administrative Expenses	51,783.15
Net Income from Operations	725,376.24
Miscellaneous Income	92,840.34
	818,216.58
Less: Miscellaneous Expenses	46,151.72
Net Profit for Year	772,064.86
Less: Appropriated for Reserves	211,532.50
Net Profit before Taxes	560,532.36
Less: Federal Income Tax	68,718.30
Net Earnings for Year	$ 491,814.06
Applied to Dividends	350,000.00
Applicable to Surplus	141,814.06
Additional Credits to Surplus	18,863.46
Carried to SURPLUS	$ 160,677.52
Current Assets December 31, 1924, were	$2,144,533.79
or, an increase over the preceding year of	517,490.42

These are as follows:

Cash	$115,978.03	
Loans Receivable, plus Accrued Interest	30,320.00	
Bullion at Smelters and in transit	261,416.04	
Broken Ore in Stopes and Mill Bin	107,375.29	
Materials and Supplies at cost	235,033.00	
U. S. Liberty Bonds at Market, plus Accrued Interest	466,562.69	
Marketable Securities, plus Accrued Interest	927,848.74	
		$2,144,533.79

There was appropriated for Reserves:

Mine Fire Insurance	$ 5,577.59
Transit Insurance	$ 2,920.19
Ore Depletion	203,034.72
	$211,532.50

Current Liabilities at December 31, 1924 ..... $ 262,560.55
or an increase of 57,407.79
These Liabilities include $192,020.29 to cover Federal Income and Profits Taxes for the years 1918, 1919, 1920 and 1924.

The ratio of Current Assets to Current Liabilities is 8.16 to 1.

Sabana Grande-Honduras Mining Company

The operation of this propertty was carried on during 1924, *with fairly satisfactory results, until the month of October, when it was found necessary to discontinue, owing to the flooding of the mine from excessive rains. It is expected that it will be possible to commence unwatering about March* 1, 1925. *When this is accomplished operations will be resumed as rapidly as possible.*

Expansion

Work has been done during 1924 *on six properties, but it is impossible to determine to what extent favorable developments may be expected. There was expended on this experimental work the sum of* $25,717.31.

Government of Honduras

We wish to extend our thanks to the Government of Honduras for the courtesies extended to us.

Audit

The books of the Company have been audited by Messrs. Ernst and Ernst, and their report has been filed with us.

Respectfully submitted,

LEWIS L. CLARKE,
President.

ANNUAL REPORT OF THE GENERAL MANAGER

SAN JUANCITO, HONDURAS, C. A., JANUARY 1, 1925.

TO THE PRESIDENT:
NEW YORK & HONDURAS ROSARIO MINING COMPANY,
NEW YORK, N. Y.

DEAR SIR:

The following is a report of operations conducted on this Company's mining properties in Honduras during the year 1924:

Production

	1924	1923
Dry tons treated	75,710	87,900
Average contents per ton:		
Ounces silver	31.855	25.894
Ounces gold	.0618	.0575
Ounces silver produced	2,186,991	2,034,492
Ounces gold produced	4,426	4,679
Ratio of silver to gold	494	435
Bars Doré Bullion	1,455	1,338
Bullion fineness silver	929.05	945.91
Bullion fineness, gold	1.88	2.17

Notwithstanding over nine weeks' complete suspension of milling operations due to political disturbances, and fire and storms, the year's silver production exceeded that of 1923 by 152,499 ounces, establishing a new record. Gold production continued small when compared with that of former years. But mine development is proceeding in veins which indicates a somewhat higher gold content. When they are brought into fuller production the downward trend in gold output should cease.

With no unusual interruptions to operations during 1925 a production equal to or greater than that of 1924 can be expected.

Honduras Operating Costs

Basis:	1924	1923
Dry tons milled	75,710	87,900
Troy ounces silver produced	2,186,991	2,034,492
Troy ounces gold produced	4,426	4,679
Total troy ounces bullion produced	2,191,417	2,039,171

	Total Costs		Per Ton		Per Troy Ounce Fine Bullion Produced	
	1924	1923	1924	1923	1924	1923
Mine						
Labor	$180,323.60	$190,271.00	$2.38	$2.16	$.0824	$.0935
Supplies	125,184.97	123,107.00	1.65	1.41	.0572	.0605
Power	7,395.95	6,456.00	.10	.07	.0034	.0032
Total	$312,904.52	$319,834.00	$4.13	$3.64	$.1430	$.1572

Mill						
Labor	$ 53,082.71	$ 45,971.00	$ .70	$ .52	$.0243	$.0226
Supplies	192,188.59	176,890.00	2.54	2.01	.0878	.0870
Power	10,567.58	11,441.00	.14	.13	.0048	.0056
Total	$255,838.88	$234,302.00	$3.38	$2.66	$.1169	$.1152
Honduras Administration	121,258.72	108,131.00	1.60	1.23	.0554	.0530
Totals	$690,002.12	$662,267.00	$9.11	$7.53	$.3153	$.3254
Credit value of gold produced	88,520.00	93,584.00	1.17	1.06	.0403	.0459
Net costs	$601,481.12	$568,683.00	$7.94	$6.47	$.2750	$.2795
Cost per Troy ounce silver produced	$.2750	$.2795				

The cost of producing one troy ounce of silver is very nearly the same in 1924 as in the year previous. On the cost per ton basis, there is an increase in each of the three departments. While such increase is due, principally, to the lower tonnage treated, there were also heavy repair and replacement charges in the Mill, a proportionately greater development footage was made in the Mine, and war and other insurance charges were, in 1924, very heavy items in the Administration Department. In the cost statement shown, expenditures beyond Honduras, such as insurance, freight and marketing of bullion, taxes, depreciation, and New York office administration are not included.

FINANCIAL

Exchange

	1924	1923
Drafts on Treasurer during the year	$465,152.52	$415,481.00
Yield in Pesos	966,002.19	878,268.00
Rate of Exchange, Average for the Year	207.674%	211.386%
Exchange Earnings on Basis of prescribed Rate of Exchange of 200%	$ 17,848.57	$ 23,653.00
Lowest Rate of Exchange during 1924	202.00%	(November)
Highest Rate of Exchange during 1924	216.00%	(January)
Rate of Exchange as of December 31, 1924	204.00%	

THE MINE

Ore Reserves

The following is a summary of the four classes of reserves, details of which will be found in Annex "A."

Summary

	Tons of Ore and Waste	Ozs. Ag. Per Ton	Ozs. Au. Per Ton	Total Ozs. Ag.	Total Ozs. Au.
Calculated ore, at 13 cu. ft.	234,800	26.382	.0490	6,194,500	11,528
Estimated ore, at 13 cu. ft.	43,000	12.840	.0609	552,500	2,620
Estimated stope filling, at 17 cu. ft.	10,000	10.000	.0355	100,000	355
Broken ore in stopes, at 21 cu. ft.	20,360	20.000	.0404	407,200	814
Totals	308,160	23.540	.0497	7,254,200	15,317

No new veins were found during 1924, but new ore discoveries in existing veins more than kept pace with ore withdrawals to the Mill, both in tonnage and in value, with the result that the positive ore reserves as of January 1, 1925, exceed those as of January 1, 1924 by 25,907 tons, 1,394,740 ounces silver and 1,978 ounces gold.

Comparing Annex "A," which shows the reserve details, with that for the year 1923, it will be observed that development responded most favorably in some of the veins, notably in the Independencia and Salvador, where the tonnage and value added during 1924 exceeds that removed in the same period, as shown in Annex "E" by a very considerable margin. The same can be said in a lesser degree regarding some of the other veins.

The per ton average of 23.540 ounces silver and 0.0497 ounces gold, as compared with 20.759 ounces silver and 0.0472 ounces gold for the year previous is based on a milling rate of between 8,000 and 9,000 tons per month, 92% silver recovery and silver price of 67 cents per ounce.

The calculated reserve blocks are shown on maps accompanying this report and detailed calculations thereof are on file in this office. The waste allowance for each vein is based on average stoping widths in 1924, on stoping methods to be used and on other considerations. The estimated reserves are in sections which hold out probabilities of better ore as stoping advances. This, together with the fact that little or no development will be required, assures in most instances a greater profit than the per ton value indicates. No extensive mining of stope filling is planned for the coming year but a reserve of this is shown in the event of mining conditions being such as to warrant its removal.

EXPLORATION AND DEVELOPMENT

Exploration, development and connections footage during 1924 exceeded that of 1923 by 698.5 feet. 58% of this footage was made in the new mine, the Esperanza country, against 44% in the year previous. The field for exploration and development

is such that in the coming year there need be no diminution in footage. Annex "C" shows the footage made in each vein.

Summary

Year	Drifts	Winzes	Raises	Cross-cuts	Total Feet
1923	5,766.5	42.0	2,557.0	1,089.5	9,455.0
1924	6,144.5	75.5	2,157.0	1,776.5	10,153.5

ORE PRODUCTION

The Mill was supplied with ore from three sources, as follows:

	1924	1923
Ore obtained by Stoping	62,703	76,592
Ore from Development Excavations	12,396	8,328
Stope Filling	531	3,016
Total Delivered to Mill	75,630	87,936
Number of Producing Veins	17	17

The tonnage supplied by each vein in 1924 is shown on Annex "D" and the total tonnage from October 1, 1907 to January 1, 1925 in Annex "E."

There is always a shortage of competent underground labor, even in normal times, but in 1924, due to political disturbances and recruiting, even greater shortage was experienced. This is indicated by the following comparison with 1923:

	1924	1923
Number of shifts worked	305	307
Average number of men per shift, including all top men	402	430

As was stated in last year's report, the lack of competent underground labor continues to be a problem for which as yet there appears to be no practical solution. This Mine has the disadvantage in being the only one of any size in Central America, hence there is no source from which miners could be attracted either by better wages or better working conditions, as is, for instance, the case in Mexico. Mechanical means have been adopted wherever practicable and while they have gone a very long way in relieving labor shortage, the limit of such means seems to be about reached. With around 200 skilled underground men more it would be possible to do cheaper and better mining. Old sections of the Mine where existing ore, while not as easily or cheaply obtainable as that in the new section, could be worked to a much greater extent. There would be greater latitude in exploration and development. All these things combined would tend to increase the life of the property as a paying proposition. In 1924, 71% of the ore milled came from the new section of the Mine, the Esperanza country, as against 52% in 1923. However, in this

instance, the abnormal political conditions prevailing throughout the year must be taken into account. It is believed that with more or less normal conditions in 1925 the old Mine will be worked at a greater rate even without any material increase in underground labor.

The "piece work" basis on stoping and other operations continues to meet with good success and is being extended wherever possible. The policy of no night or Sunday work in the Mine, except to a very limited extent, continued to be strictly adhered to. In the future it may become advisable to do some work at night but at the present time the underground conditions and labor shortage do not warrant it.

VEINS WORKED

The work done in each vein during 1924 is briefly reviewed under the following headings:

Buena Ventura Vein

The ore reserve estimate is the same as that reported a year ago, though 1,064 tons were mined in 1924. In addition to this reserve 1,000 tons of low grade stope filling is reported, obtainable mostly from the upper levels. No extensive work is planned in this vein until it is near the center of operations.

Candelaria Group

Reopening the extensive workings of this vein and its stringers continued throughout the year. In several instances it was found cheaper and quicker to drive new drifts and raises instead of recovering existing ones, and 363.5 feet of such work was done in 1924. Wherever practicable this driving is in stringers or unmined sections of the Candelaria itself and later connection made with the workings as it has been found that occasionally the stringers and the vein driven on are of stoping width and ore bearing.

While the workings where important quantities of medium grade ore and stope filling exist have as yet not been reached the ore output in 1924 was 3,667 tons. Notwithstanding this the reserve estimate is the same as that reported a year ago.

Carmen Vein

The ore output during 1924 was 971 tons as compared with 3,783 tons during 1923. Development consisted of 196 feet at the Upper 350 and the Upper 450 levels with the main object of tracing out the vein to determine its relation with the Salvador and Fortuna at these levels. As was mentioned in the 1923 report, the

intersection of the Carmen, Fortuna and Salvador, both in plan and vertical section, is in the vicinity of the Upper 550 level. As yet sufficient work has not been done at this point to be able to say whether or not this vein continues beyond the intersections noted.

With the information now obtainable at the Upper 350 level and that from the winze in the Salvador vein about 30 feet below the Zero level it was possible to calculate an ore reserve of 16,000 tons, averaging 30 ounces silver and .04 ounces gold, as against 14,500 tons, averaging 25 ounces silver and .04 ounces gold, reported the year previous.

Catalina and North Veins

In conformity with the plan to mine ore at a greater rate in the old mine, preparatory work in the Catalina and North veins was concluded and machine stoping started in each the latter part of the year. The Catalina produced 611 tons and the North, 524, this being their first output since 1909. Though in entirely different sections of the Mine, these two veins are similar in that the ore exposed in each will average considerably less than one half foot in width, though assaying in many places into the hundreds of ounces of silver. Both being in hard rock they could not be made to pay by hand mining methods prevalent in 1909, excepting where the vein was wide. This resulted in the narrow portions of the vein being left, creating, as can be seen on the maps, very irregular and only narrow vein stope backs. With machine mining, stoping is to be carried through the pinches as well as the swells and it is believed that ultimately this method will bring in considerable quantities of profitable ore.

In the Catalina vein there are good ore possibilities south of the Upper 250 and Upper 350 levels. In the North vein conditions may be similar to those found in the Socorro, where, after machine stoping was started in the narrow and irregular stopes, the vein widened and continued upward for over 300 feet in good ore of an average width well over one foot.

Culebra Vein

The 1924 ore production of 5,116 tons is less than one-third that of 1923. This mostly is due to the fact that, Culebra ore being of low grade, labor shortage required shifting many of the miners to higher grade veins. Development, however, continued throughout the year and consisted of 640 feet. At the Upper 500 level the south heading, the southernmost on the vein, was extended 260 feet, some low grade ore being disclosed. At the Upper 150 and Upper 250 levels work consisted principally in determining the relation of the vein there with that at the higher

levels so productive in the past. The existence of a branch vein in certain sections has been suspected for some time. In the coming year this is to be investigated and driving southward on the Culebra at some of the upper levels continued.

The ore reserve is about the same as that reported a year ago despite an ore output of 5,116 tons in 1924.

Esperanza Vein No. 3

This vein has produced no ore since 1917. What ore remains is below the floor of the Upper 150 level. Being the southerly extension of the South San Miguel, as work in this proceeds southward at the Zero level the ore in question will then be stoped.

Fortuna Vein

This vein was an important ore producer during 1924, the tonnage obtained being 4,777 against 906 during 1923. Development, which consisted of 736 feet, was confined to the Upper 350 and Upper 450 levels, and driving a raise to the Upper 550 level. The ore exposed by this work is on the whole not as rich and more spotty than that in other sections of the vein at more or less the same elevation.

The Carmen and Salvador veins incline toward each other on their respective dip and on their strike join at a moderate angle. The Fortuna vein exists between them and while joining each does not cross either, as far as is proven at the present time. It follows, therefore, that the Fortuna vein will diminish in lateral extent as the combined junction of dip and strike of the Carmen and Salvador is approached and when reached, cease to exist beyond it. Nothing definite can be said on this score until work at the Upper 550 level, where the junction referred to exists, is further advanced. But, from what has just been said, the inability to find the Fortuna beyond the junction would not be surprising.

Independencia Vein

This vein, though intersected by the Esperanza Cross-cut only in September, 1923, has proved a very valuable find. This is evidenced by an ore reserve of 28,000 tons, averaging 50 ounces silver and .10 gold, against 12,600 tons, averaging 35 ounces silver and .06 ounces gold for the year previous and despite an ore production during 1924 of 9,824 tons. The 1,884.5 feet of development in 1924 therefore has responded very favorably, and furthermore, there is every reason to believe that more or less the same results can be looked for from development to be done in 1925. A noticeable feature, and one of much importance in view of diminishing gold production, is the fact that the Independencia carries somewhat more gold in proportion to the silver than is the case with the

other veins of the Esperanza country. This was not entirely unexpected as the possibility of encountering veins of higher gold content was taken up about three years previous or in the 1920 Annual Report in discussing the Esperanza Cross-cut.

For a time the western extension of the vein was lost at the Upper 150 level, but by cross-cutting to the south a short distance it was picked up again and so far has continued in ore averaging as well as that of the reserve. In its eastern strike the vein entered looser ground, with a tendency to swing southward and split into stringers. As yet there has been no diminution in value in this section, but such diminution would not be unlooked for should the tendency to swing to the south continue, as it would then enter the disturbed ground which caused impoverishment and splitting up of the Salvador vein. In continuing its present western strike the vein should encounter the Crucero formation which formation, though traversed over its entire extent by the Clarke Tunnel and Crucero Cross-cut, has proved devoid of ore bearing veins. The exact location of the contact between the Crucero formation and the vein bearing rhyolite in which the Independencia also exists, is not known. But it is believed that so far as the Independencia is concerned at least 1,000 feet of the rhyolite remains before the contact is reached.

During 1925 efforts will be made to connect with the surface for the purpose of much needed ventilation and greater facility in handling materials, which will require about 600 feet of raising. Special efforts will be made to make this surface connection before the end of the year.

Northwest Vein

This vein continued to be a steady producer, its output in 1924 being 3,936 tons. Development consisted of 486.5 feet, most of which was drifting to the southeast on the Upper 500 level. With the exception of about 75 feet, no ore worth stoping was encountered. Connection was made with the Upper 500 Buena Ventura level which will greatly facilitate stoping and tramming of most of the Northwest ore obtainable above the Upper 500.

As a section of the vein between the Upper 350 and Upper 500 levels has never been satisfactorily traced out, work with this end in view will probably be started in 1925. If the vein has actually been faulted to the notheast, as one of the shallow stopes at the Upper 350 level seems to indicate, then there are possibilities that an important block of ore may be encountered.

Rosario Vein

The ore output during 1924 of 2,020 tons was about one-fifth that obtained during the year previous. This large decrease was not due to lack of ore, but to the great distance of the places where

such ore is located with respect to the section of the mine where most of the work is now being done. Development of 514.5 feet consisted in prospecting and opening up isolated blocks of ore, mostly exposed in the floor of the old levels. The ore reserve estimate stands the same as the year before, namely, 7,000 tons, averaging 12 ounces silver and .12 gold.

Salvador Vein

On January 1, 1924, ore reserves in this vein stood at 83,900 tons, averaging 26 ounces silver and .03 gold. During 1924, 37,916 tons of ore were extracted, but the ore reserves as of January 1, 1925, are 90,000 tons of ore, averaging 28 ounces silver and .03 gold, indicating that the 1924 development, consisting of 2,511 feet, notwithstanding the heavy ore production, was most successful.

Work so far done to determine if this vein extends beyond the Carmen-Salvador-Fortuna Junction, both vertically and laterally, has not advanced sufficiently to be able to form any definite opinion. There are two possibilities, one that beyond the junction the three veins merge into one, or that they cross each other and continue with more or less the same strike and dip. In all probability this very important information will be obtained in the coming year. The junction in question is at the Upper 550 level where driving is now being done in a northwesterly and southeasterly direction, on a vein of good width and value. At the Zero level 608.5 feet were driven, this work indicating that the ore at this elevation is somewhat baser than that at the Upper 150 but showing no diminution in value. The winze which is being sunk below the Zero level and now 28 feet deep, contains ore as good as that on the Zero. 267.5 feet were driven southeasterly at the Upper 150 level to determine the lateral limits of the vein in this direction. No ore was found, also no information obtained which would lead to the definite belief that the vein limits in this direction have been reached. No work was done during the year to determine the vein limits in a northwesterly direction. The headings of all the levels in this direction are in hard ground, showing a vein of but few inches in width and assaying a few ounces silver. However, prospects of encountering ore are considered fair, therefore some drifting will probably be done to the northwest at the Upper 250 and Upper 350 levels in the coming year. While the policy is to diminish ore output from the Esperanza country and give preference to the old section of the Mine, in case of necessity during 1925 the output from the Salvador could be made to exceed that of 1924 by a very considerable margin.

Santa Gertrudis Vein

This vein will be remembered as a stringer off the Southwest vein. Its development commenced in 1923 and by the end of that year it was possible to show a reserve of 6,000 tons, averaging 27 ounces silver and .03 gold. During 1924 the ore output consisted of 2,773 tons from a vein, which though exceedingly narrow and irregular, proved nevertheless of very high grade. The 1924 development was 222.5 feet, nearly all being confined to driving the Upper 150 level southward. With what this work, as well as the stope, has disclosed, it has been possible to calculate a reserve of 10,000 tons, averaging 22 ounces and .02 gold. No work was done at the Zero level, but possibly this will be started some time in 1925.

This vein, in its southern extent, is striking directly towards the most productive section of the Esperanza country, therefore its future prospects are considered good.

South San Miguel Group

Development and connection footage amounted to 462 feet during 1924. The southernmost workings of this vein and its stringers were connected with the Esperanza cross-cut for the purpose of cheapening stoping and tramming of the ore from this section. The raise started at the Lower 200 ft. level to prospect the vein encountered no ore. There is still hope that some ore will be found at the Lower 100 and Zero levels, at the latter particularly. Stoping is being done at the Zero, Upper 150 and Upper 250 levels and while in 1924 ore production consisted of 1,668 tons, it is expected that in 1925 the output will be very considerably increased. The South San Miguel still has possibilities southward and drifting in that direction should be done at one of the upper levels, perhaps the Upper 350.

Southwest Vein

The shaft was sunk to a depth of about 80 feet below the Zero level, but work was stopped owing to encountering water, and lack of shaft sinking miners. About 100 feet of drifting was done on the vein to the northeast at the Upper 150 level, a small body of ore being exposed which is being stoped. The information obtained from the shaft and the work at the Upper 150 has caused revision of the ore reserve which, for 1925, shows a greater tonnage of lower grade than that reported the year previous. The 1924 ore output consisted of 249 tons.

Termópilas Vein

This vein is credited with an output of several thousand tons of very high grade ore which was obtained from surface workings by the natives in the early days. In 1923 this vein was intersected

at the Upper 150 level at a depth below the surface workings of about 700 feet. No ore of commercial importance being found at the point of intersection, a raise 175 feet in height was driven and two levels on the vein started. The highest level, the Upper 300, in which about 200 feet of drifting was done, has disclosed a vein about a foot in width, which will assay around 25 ounces silver, and with a better proportion of gold than that in most of the other veins. The raise is to be continued, as the prospects of the ore becoming richer nearer the surface appear fair. No extensive lateral development is contemplated until it is learned what the raise in question discloses. The 1924 development consisted of 566 feet and ore production, 441 tons. As an ore reserve 2,000 tons averaging 16 ounces silver and .09 ounces gold are estimated.

West Vein

It has been fairly well established that the vein on which development was done in a westerly direction at the Upper 150 level in 1923 is a continuation of the West vein, which forms the Southwest vein further ahead. In view of this and proximity of the Southwest vein workings, no further driving was done at the Upper 150 level. Of the ore found in this section, that below the floor of the Upper 150 level still remains. At an opportune time a winze is to be sunk on this ore for the purpose of stoping and learning its downward extent. No development was done during 1924 and only 58 tons of ore extracted.

There are small pillars of ore in the West vein in the neighborhood of the Catalina junction which probably will be mined as soon as accessible through the Catalina.

Colonia Vein

Outside of extending the Lower 650 raise 11 feet, and removing 8 tons of ore, no further work was done in this vein during 1924. Labor conditions permitting, efforts will be made in the coming year to bring nearer to conclusion the connection between this raise and the Lower 300 level. Until this connection is made it will be impossible to mine any of the ore existing in the Colonia workings.

Veins Not Worked in 1924

These were the San Joaquin, Capitana, Socorro, Nueva, North San Miguel, Concepcion, Crisanta, Jucuara, Guadalupe and San Vicente. Each of these veins contains stoping ore and, with one or two exceptions, is a field for profitable development. In carrying out the general policy of increasing output from the old section of the Mine, work will be done in some of these veins in 1925.

Lower 650 *Esperanza Cross-cut*

To facilitate and cheapen development, stoping and delivery to the Mill of the very large quantity of ore known to exist in the Carmen, Fortuna, Salvador and Independencia veins below the Upper 150 electric haulage level a cross-cut, to be called the Lower 650 level Esperanza Cross-cut, is to be started in the coming year. When it reaches the vicinity of the veins two raises are to be driven to act as general ore and waste chutes. The ore chute is to be extended to the Upper 150 level for the purpose of handling most of the Esperanza ore now handled by the Upper 150 electric haulage and releasing this haulage for other work.

Upper 150 *Esperanza Section Adit*

In the 1923 report mention was made of the advisability of a much shorter entry from the surface into the Esperanza country and in 1924 a cross-cut was started with this and other ends in view. After attaining a length of 186 feet heavy storms caused the ground around the portal to shift and further work at this location had to be abandoned. In the coming year a safer site is to be selected and this much needed Adit again started.

FUTURE EXPLORATION AND DEVELOPMENT

Summing up what has been said concerning past work in and future possibilities of the various veins, the outstanding requirements in exploration and development are about as follows:

Culebra Vein

Exploration southward on some of the principal levels as possibilities of finding more ore bodies in this direction are considered good. Also locating the Culebra on the lower levels.

Esperanza Cross-Cut

To be continued on its present course until vicinity of the veins or stringers, of which there is some evidence at the surface, is reached.

As stated in last year's and other reports the exploration of narrow stringers in highly ore bearing territory is most important because, in this Mine, all the veins have very narrow and valueless sections extending over considerable distances. The Esperanza Cross-cut has intersected several narrow stringers, and from what has just been said, some of these may well be narrow sections of very valuable veins. Therefore, as soon as practicable, some of these stringers are to be driven on.

Independencia Vein

This vein having been discovered only 14 months ago its development is to be kept at a maximum and little or no stoping done until this is very considerably advanced.

In the event of the contact between the rhyolite and Crucero formation being encountered in the western headings and the vein stopping at the contact, driving is to be done along the contact and in the rhyolite, so that any veins therein, but which do not enter the Crucero formation, are not overlooked.

Jucuara Vein

Should work in the Southwest vein drain the present Jucuara shaft, sinking on the existing ore body is to be resumed. At the same time work is to be done on some of the likely looking stringers in the vicinity of the Jucuara vein and contact.

Porvenir Vein

Exploration of the vein above its present highest workings. The ground overhead is extensive and possibilities of encountering ore fair.

Salvador-Carmen-Fortuna Veins

Further work to determine lateral limits of the Salvador by driving southeast and northwest. The possibilities of encountering ore quickly by driving to the northwest appear to be fair.

Driving to the northwest on the Carmen, at the Upper 150 level.

To the north, on the Fortuna, on the same level, until the junction with the Carmen is reached. Driving on stringer branching to the left off the Fortuna on the Upper 150 level.

San Joaquin Vein

Exploration to the southeast on one of the lower levels.

Santa Gertrudis Vein

Driving southward to continue even if vein has discouraging aspect, as it is striking directly for the Esperanza country, therefore into very productive territory.

Termopilas Vein

Exploration of territory above the present highest workings, preferably beneath the surface stopes.

Nueva Vein

Further exploration of vein below the Lower 300 level eastwardly, either from the Lower 450 level or through the Lower 650 level.

Socorro and North Veins

Driving southward at one of the upper levels to determine if these veins cross the Guadalupe vein.

Surface Prospects

Further exploration and development of gold bearing stringers located in the Escobales Gulch below the Escobales Flume Line on which some work already has been done.

These recommendations, given under the heading of "Exploration and Development," by no means cover the whole field of this most vital branch of the operations, but they are brought to mind as evident requirements suggested by last year's work.

MINE EQUIPMENT

Air Compressor Plant

The capacity of the air compressor plant was increased to 5,200 cubic feet free air per minute by the installation in the middle of the year of a new direct connected 950 cubic feet Ingersoll Rand air compressor. The present plant capacity will be ample for some time and a saving in power will be effected by operating a small compressor unit when only a small amount of compressed air is required.

Drilling Equipment & Sharpening

Experiments were made with a new model stoping drill, suitable for very hard ground, and this model will be adopted as necessity for purchasing new drilling equipment arises. A new and more powerful drill sharpener was installed, which, in conjunction with the one already existing, will obviate the necessity and expense of sharpening drill steel after shift.

Mention was made in last year's report concerning the use of producer gas instead of charcoal. No further experiments were made in 1924 owing to unsettled conditions in the country, but it is expected that in the coming year this question will be given further attention.

Pipe Lines

The increasing demand for air in certain sections of the Mine made it necessary to increase the diameter of some of the existing pipe lines. While, owing to lack of competent labor as much of this work was not done as conditions require, there has nevertheless been a material reduction in friction losses, with the result that air pressure at the drill is, in most sections of the Mine, now nearer that at the compressors than has been the case for some time.

Permanent pipe lines are now being installed overhead instead of being laid along the wet floor. While representing a greater first cost, this method is cheaper in the end in that the pipe is conserved, and it is more satisfactory, particularly on electric haulage levels.

Much work was done in repairing leaky piping and it is believed that less air is now being lost on this account than for some time past.

Haulage

Both the Upper 150 and Lower 650 electric haulage systems operated satisfactorily during the year. While replacements to track have been continuous, such work, owing to shortage of competent labor, has lagged considerably behind requirements and this is particularly true with respect to the Upper 150 electric haulage. On the hand haulage all new track laid is 18″ gauge, the existing 16″ gauge being replaced by it wherever conditions warrant. After experiments over a considerable length of time, a standard one-man car has been adopted which is proving quite satisfactory.

Mine Office & Warehouse

On the night of March 11th a fire of unknown origin completely destroyed the two story Mine Office and Warehouse located at the Lower 200 level portal. The principal loss in supplies was that of blasting caps, fuse and some carbide, the caps exploding with tremendous force in a succession of blasts which showered with débris the camp, located about 300 feet below and one half mile away. Less than 50 feet distant from the burnt building is situated one of the dynamite magazines in which, at the time of the fire, some two tons of dynamite were stored. Fortunately, the fire hydrant got out of order, supplying but little water, for had there been adequate pressure it is possible water might have been played upon the calcium carbide, creating a real catastrophe. As it was, considerable quantities of carbide blown into a gulch containing water caused a stream of fire down the mountain side which continued well into the following day. Only about five feet distant from the dynamite magazine is located the former Mine Office, but now used as a tool room. This building was on fire which very fortunately was put out before making any head-way.

The matter of rebuilding has been gone into very carefully and it has been decided to abandon the old site entirely. For the dynamite magazine an isolated spot in a depression of the mountain on the road to the Peña Blanca level has been chosen and excavation for the magazine is well along. The Mine Office, Warehouse and Tool Rooms are to be located at the Peña Blanca level, but several hundred feet away from the compressor house, and their construction is to be as fireproof as possible. With the dynamite magazine away and caps and other inflammables each in separate buildings, even in the event of fire this should be only a local affair. All the above detail is gone into because the new construction is going to involve a considerable outlay, particularly for excavations.

THE MILL

Tonnage Crushed

	1924	1923
Total wet tons received	84,078	98,862
Average percent moisture	10.0	11.0
Total dry tons milled	75,710	87,900
Average tons per day milled (365 days)	207	240
Average tons per day milled, full running time (270.91 days)	279	....
Average tons per day milled, full running time (283.02 days)	....	310
Average tons per day milled, per 1,850 lbs. stamp	13.9	15.5
Number of 1,850 lb. stamps	20	20

Recovery

	1924	1923
Average ounces silver received per ton	31.855	25.894
Total ounces silver received	2,411,742	2,276,082
Average ounces silver recovered, per ton	28.886	23.146
Total ounces silver recovered	2,186,991	2,034,492
Average silver recovery, per cent	90.68	89.39
Average ounces gold received, per ton	.0618	.0575
Total ounces gold received	4,678	5,051
Average ounces gold recovered, per ton	.0585	.0532
Total ounces gold recovered	4,426	4,679
Average gold recovery, per cent	94.61	92.64

Supplies Used

	1924 Per Ton Ore Crushed	1923 Per Ton Ore Crushed	1924 Per Oz. Fine Bul'n Produced	1923 Per Oz. Fine Bul'n Produced
	Tonnage 75,710	Tonnage 87,900	Grade of Ore Ag. 31.855 Au. .0618	Grade of Ore Ag. 25.894 Au. .0612
Cyanide, 96-98%	1.9442 lbs.	1.716 lbs.	.067171 lbs.	.073965 lbs.
Cyanide, 48%	8.0875 "	5.869 "	.279410 "	.252971 "
Cyanide, 37-41%	.....	0.0364 "	.....	.001569 "
Zinc Dust	1.3710 "	1.052 "	.047365 "	.045356 "
Muriatic Acid	0.0763 "	0.0862 "	.0022638 "	.003715 "
Lime 100%	16.2574 "	14.715 "	.561669 "	.624306 "
Borax	0.1012 "	0.0633 "	.003495 "	.002729 "
Soda	0.0498 "	0.0292 "	.001720 "	.001258 "
Fuel Oil	0.0911 gal.	0.0872 gal.	.003149 gal.	.003760 gal.
Artificial Pebbles	95.2318 lbs.	96.656 lbs.	3.290109 lbs.	4.166448 lbs.
Foreign Pebbles	1.5138 "	1.751 "	.052300 "	.075500 "

Recovery

The recovery of 90.68% of the silver and 94.61% of the gold during 1924 represents a new recovery record for the present Mill. The following comparative statement shows the percentage of

value extraction by each of the three principal cyanide treatment stages. It will be noted that the higher recovery by 1.97% of the silver and 1.36% of the gold in 1924 is due to a combination of better extraction and a decrease in dissolved value loss.

Recovery detail

	1924				1923			
	Hrs.	Min.	Silver %	Gold %	Hrs.	Min.	Silver %	Gold %
Extraction by Crushing Solution	9	00	37.70	75.73	9	00	40.58	79.25
Extraction by Agitation	78	45	52.70	18.77	75	00	49.23	14.05
Extraction in Slimes Presses	1	15	1.09	.81	1	15	.86	1.00
	89	00	91.49	95.31	85	15	90.67	94.30
Less Dissolved Value Loss			.81	.60			1.28	1.66
Recovery			90.68	94.61			89.39	92.64

Metallurgical Improvements

To further increase the percentage of value recovery or at least maintain present recovery figures on a larger tonnage milling basis, new additions to the plant have been necessary. These are:

One—New 4 x 10 ball mill to increase fineness of grinding. Already installed but as yet not in operation.

Two—New high agitation tanks to permit a longer period of treatment. Already purchased.

One—500 cubic feet air compressor to supply the additional air required by increased agitation tank capacity. Now being installed.

Full benefit of these installations will not be obtainable until the latter part of 1925.

In last year's report mention was made of a process whereby most of the cyanide now going to waste with the tailings could be reclaimed. Further investigations were made during 1924 with the result that it is very likely this process will be purchased and perhaps installed during 1925.

Repairs.

Repairs and replacements to tanks and pipe lines represented heavy items of expense, being $13,982 in 1924 aganist $7,912 for the year previous. Of the high agitation tanks seven have been repaired and should be serviceable for some years to come. The remaining tank will receive attention as soon as erection of the two new agitation tanks is concluded. There are other large tanks, some of which require almost immediate attention and as much work on these will be done in the coming year as conditions permit.

Refining

A vault was built to store precipitates which, together with the bullion vault, now gives ample room to take care of both bullion bars and precipitates under lock and key inside the refinery.

The cost of producing one bar Doré bullion from precipitates was, in 1924, $9.65 as against $9.36 in 1923.

In the coming year a substantial shipment of precipitates is to be made and the cost compared with that of shipping Doré bars. If an important saving is indicated the product will then be shipped as precipitates as was the case in former years.

HYDRO-ELECTRIC POWER PLANTS

San Juancito Plant

Static Head:	1,357 feet.
Pipe Line:	4.739 feet of 20", 17" and 14" pipe.
Equipment:	2—350 KVA, 6,600 volts, 60 cycles, A. C. Generators, each coupled directly to a 600 H. P. Pelton Wheel.
Flume Lines:	The Escobales and Aguacatal: built of wood, total length, 17,000 feet.
Output in 1924:	2,672,770 kilowatt hours, representing 53.2% of total power produced.

The need of overhauling the San Juancito Plant was mentioned in last year's report. Accordingly during 1924 one of the water wheels was brought to the Machine Shop and repaired. In the coming year the remaining unit is to receive the same attention. The pipe line serving this plant is in good condition but it will be necessary to scrape and paint it during the next dry season.

Guadalupe Plant

Static Head:	502 feet.
Pipe Line:	2,350 feet of 20" pipe.
Equipment:	2—350 KVA—6,600 volts, 60 cycles, A. C. Generators, each directly connected to a 450 H.P. Pelton Wheel.
Flume Lines:	The Guadalupe, 6,000 feet in length, new.
Output in 1924:	2,342,830 kilowatt hours, representing 46.8% of total power produced.

Since installation of a larger flume the Guadalupe Plant produced a greater percentage of power than ever before. It now being possible to supply more water than the rated full capacity of the plant requires, it appears that such full capacity is not obtainable, that this is due to excessive loss of head due to pipe friction and that the only remedy is installation of larger diameter pipe. The present pipe, installed in 1908, and repaired in 1921, is showing signs of weakness, and when the time comes to replace it one of ample diameter should be purchased.

The following comparative statement shows distribution of power used and its cost.

POWER DISTRIBUTION

	Kilowatt Hours 1924	K.W. Hours per ton 1924	Kilowatt Hours 1923	K.W. Hours per ton 1923
Mine Power	1,560,640	20.613	1,666,627	18.960
Electric Haulage	228,763	3.022	217,565	2.475
Mine Lights	15,396	.203	10,878	.125
Mill Power	3,008,404	39.736	3,337,354	37.968
Mill Lights	26,806	.354	27,196	.309
Surface Lights	25,422	.336	27,196	.309
Surface Power	116,854	1,543	108,782	1.237
Machine Shop	25,622	.338	27,195	.309
Laboratory	7,693	.102	16,317	.186
Totals	5,015,600	66.247	5,439,110	61.878

Power Production by			
San Juancito Plant	53.2%	2,672,770	kilowatt hours
Guadalupe Power Plant	46.8%	2,342,830	" "
Total		5,015,600	" "

COST OF POWER PRODUCTION

	1924 Amount	1924 Per Ton	1924 Per K.W.Hr.	1923 Amount	1923 Per Ton	1923 Per K.W. Hr.
Labor	$13,950.52	.18	.00278	$14,750.10	.17	.00271
Supplies	4,837.96	.06	.00096	3,758.31	.04	.00069
Total	$18,788.48	.24	.00374	$18,508.41	.21	.00340

Based on horsepower generated:

	1924	1923
Horsepower Hours	6,723,324	7,291,030
Cost per Horsepower Hour	$ 0.00279	$ 0.00253
Cost per Horsepower Year	$ 24.44040	$ 22.16280
Cost per Horsepower Year, Increase	$ 2.27760	$

Flume Lines

Heavy storms caused considerable damage to flume lines serving the two power plants. Permanent repairs have been completed and unless severe storms occur during 1925 there should be no delays to operations due to lack of power on account of flume difficulties. The Aguacatal flume is in bad shape and if the cost of its maintenance becomes excessive, it should be replaced by a new flume.

New Reservoir

The new reservoir for the San Juancito Plant was put into use last Fall, and is proving a very great benefit. Water, which at low load periods went to waste, is now impounded and used during peak load periods, consequently full operation of the property is now possible for an appreciably greater number of days during the year than could have been the case formerly.

The cost of the reservoir was $38,816.00, which will be offset very quickly by the benefits obtained.

Transmission Lines

There was no delay to operations on account of high voltage transmission line troubles. The advantage of a duplicate power line between San Juancito and Rosario has permitted the maintenance of each in first class condition. The total length of high voltage transmission lines is about 23,000 feet.

Rainfall

	1924	1923	1922
Total rainfall, inches	66.47	47.12	59.35
Number of days during which rain fell	203	164	153
Greatest rainfall in one month	13.79 Oct.	13.24 June	11.08 June
Greatest single rainfall	3.53 Oct.	2.09 June	4.78 Sept.

It will be noted that the rainfall during 1924 was greater and better distributed than was the case during 1922 or 1923. The heavy rain in October did considerable damage to roads and flume lines. Besides causing entire suspension of operations 24 hours, it cost about $6,000 to effect repairs.

MECHANICAL DEPARTMENT

In the 1923 report the necessity of moving the Machine Shop to a better and larger site, and also installation of a foundry, was explained in detail. Work with these two ends in view was started in the middle of 1924 and it is expected that some time in 1925 the new Machine Shop and the Foundry will be put into service.

The larger electric welding set, of which mention was also made, was installed. It has proved of great advantage, both from the standpoint of utility and the saving in cost of labor and supplies. Its principal use, so far, has been in making repairs to the steel cyanide tanks.

Medical Department

	1924	1923
Number of treatments, foreigners	255	238
Number of treatments, natives	3,556	4,121
Total number of treatments	3,811	4,359
Cost of maintenance	$ 5,565.33	$ 4,988.00

The policy of rendering medical and hospital service free, notwithstanding the franchise right to deduct 2% from the earnings of each employee, foreign or native, as explained in detail in the 1923 report, was maintained throughout 1924 and is also to be maintained during the coming year.

Assay Office and Laboratory

	1924	1923
Total number of assays run	17,372	20,123
Average number of assays per day	47	55
Total cost	$ 6,675.36	$ 6,815.92
Cost per assay	.38	.34

Other Departments

Hotel

	1924	1923
Total number of meals served	31,851	27,939
Total cost	$17,738.13	$15,184.24
Cost per meal	0.556	0.543

Roads

Total maintenance	$ 4,290.01	$ 1,820.00
Increase	2,470.01	

The increase is due mostly to extra repairs required on account of heavy storms.

Schools

Average daily attendance during year

Boys' School	73	83
Girls' School	108	74
Total expense	$ 6,971.54	$ 6,860.00

Police and Garrison

Total maintenance expense	$10,025.62	$11,187.00
Decrease	1,161.38	

Agencies

Total expense	$ 5,742.48	$ 3,124.00
Increase	2,618.48	

The increase is due to necessity of a Special Agent at Tegucigalpa during the revolution.

EXPANSION

Sabana Grande Honduras Mining Company

	1924 (10 months)
Dry tons milled	9,533.119
Average ounces silver per ton	30.860
Average ounces gold per ton	0.154
Ounces silver produced	252,559.400
Ounces gold produced	1,326.843
Silver recovery, %	85.840
Gold recovery, %	90.000
Feet development driven	1,750.000
Total Honduras operating cost, U. S. C.	$ 91,932.49
Honduras operating cost per ton, U. S. C.	$ 9.64

Milling operations during 1924 extended over a period of ten months with the results indicated in the above statement. They were entirely suspended on November first due to rains and a flood which submerged all the ore producing levels.

Owing to high power costs, no attempt is to be made to unwater the Mine until the next dry season is well advanced as it is believed the amount of water entering the Mine then will have decreased to within the limits of the pumping plant.

With respect to ore reserves, the character of the San Marcos vein is such that it is impossible to see more than a month or two ahead of milling requirements. There is, however, sufficient ore assured to warrant unwatering the Mine and starting up the Mill to treat it. In the meantime the San Marcos vein is to be explored in the territory below the Mill which is about 4,000 feet in lateral extent on the vein and where no work has ever been done.

Moramulca Prospect,
Moramulca, Department of Choluteca

The Company now has title to nearly 1,100 hectares of mineral rights in this district. Work was started on two of the most likely looking veins in the latter part of the year but it has as yet not progressed sufficiently to permit forming any opinion as to the value of the property.

Moloncosa Prospect,
El Corpus, Department of Choluteca

The Company has title to about 17 hectares of mineral ground. During the year several hundred feet were driven to intersect and prospect a large gold bearing quartz dyke which is the principal feature of this property. High grade gold bearing seams have been found in the dyke, none of which are, so far, of either sufficient width or extent to be of commercial importance. The main object, however, is to determine whether the whole dyke averages sufficiently in value to be workable on the basis of a large low grade proposition. Further work is necessary before this feature can definitely be determined.

Aurora Santa Elena
Department of Tegucigalpa.

This zone represented the holdings of the Aurora Mining Company and is a little over 900 hectares in extent. It is adjacent to Rosario ground on its southern boundary. In 1918 the Company took a two year option but the results of 18 months' prospect work did not warrant its being exercised. In the past year the property was offered for sale outright and was purchased by the Company. More prospect work is to be done at an early date.

San Buenaventura,
El Corpus, Department of Choluteca

Provisional title to about 30 hectares of mineral ground was obtained and application for final title has been made. This prospect is located a short distance from the Moloncosa. It consists of a network of veins and stringers, some of which assay exceedingly high in silver and gold. Prospect work is to be started at an early date.

CONCLUSION

The foregoing report will indicate that throughout 1924 operations were carried on under abnormal conditions. Despite this it was possible to set a new record in silver production and, by exploration and development, bring ore reserves to figures which, compared with those reported a year ago, show an increase of 1,394,740 ounces silver and 1,978 ounces gold. As the quantity, quality and accessibility of the ore reserves is very satisfactory, there is good reason to believe that the same production as last year or even higher can be looked for in 1925.

Improvements having to do with more economical operation and better value recovery by the Reduction Works and higher efficiency from the two hydro-electric power plants, of which mention was made in last year's report, are in process of installation. While entailing considerable financial outlay it is believed this will be offset quickly by the resulting better production and cheaper operation. The most notable improvement of this nature was the construction of the new reservoir which, by the end of 1925, will have more than paid for itself.

This opportunity is taken to extend to you, the Officers and the members of the Board of Directors, full appreciation for the confidence and support given in the past year and draw to your attention the faithful and efficient service rendered by the staff to whom much credit must be given for what has been accomplished in 1924.

Very truly yours,

A. R. GORDON,
General Manager.

Annex "A"

Summary of Calculated Ore Reserves

(At 13 cu. ft. per ton)

Veins	Av. Width Feet	Per Cent Waste	Tons of Ore & Waste	Ozs. Ag. per ton	Ozs. Au. per ton	Total Ozs. Ag.	Total Ozs. Au.
Carmen	1.8	50	16,000	30	.04	480,000	640
Culebra	1.6	35	22,000	16	.05	352,000	1,100
Fortuna	1.3	40	15,000	24	.03	360,000	450
Independencia	2.1	45	28,000	50	.10	1,400,000	2,800
Salvador	2.3	40	90,000	28	.03	2,520,000	2,700
Santa Gertrudis	1.0	73	10,000	22	.02	220,000	200
San Joaquin	1.0	60	9,500	15	.12	142,500	1,140
North San Miguel	1.6	35	4,800	15	.06	72,000	288
So. San Miguel Group	1.4	50	31,500	16	.06	504,000	1,890
Southwest	1.5	40	8,000	18	.04	144,000	320
Totals		44	234,800	26.382	.049	6,194,500	11,528

Summary of Estimated Ore Reserves

(At 13 cu. ft. per ton)

Buena Ventura	3,000	12	.06	36,000	180
Candelaria Group	5,000	12	.06	60,000	300
Capitana	3,000	10	.13	30,000	390
Catalina	3,000	14	.05	42,000	150
Colonia	3,000	14	.07	42,000	210
Esperanza	1,500	15	.05	22,500	75
Guadalupe	1,000	12	.03	12,000	30
Jucuara	2,000	12	.05	24,000	100
North	2,000	14	.05	28,000	100
Northwest	4,000	14	.05	56,000	200
Nueva	1,500	12	.05	18,000	75
Porvenir	2,000	13	.05	26,000	100
Rosario	7,000	12	.06	84,000	420
Socorro	1,000	14	.05	14,000	50
West	2,000	13	.03	26,000	60
Termopilas	2,000	16	.09	32,000	180
Total	43,000	12.84	.0609	552,500	2,620

Summary of Estimated Stope Fillings
(At 17 cu. ft. per ton)

Candelaria	3,000	10	.04	30,000	120
Guadalupe	2,000	10	.03	20,000	60
Rosario	2,500	10	.04	25,000	100
West	1,500	10	.03	15,000	45
Buena Ventura	1,000	10	.03	10,000	30
Totals	10,000	10	.0355	100,000	355

Summary of Broken Ore in Stopes
(At 21 cu. ft. per ton)

Totals	20,360	20	.04	407,200	814

Total Summary

Calculated Ore	234,800	26.382	.049	6,194,500	11,528
Estimated Ore	43,000	12.84	.0609	552,500	2,620
Estimated Stope Fillings	10,000	10.00	.0355	100,000	355
Broken Ore in Stopes	20,360	20.00	.04	407,200	814
Totals	308,160	23.54	.0497	7,254,200	15,317

308,160 tons of average metal content per ton at Mill—Silver . . . 23.54
Gold 0497

Annex "B"

BROKEN ORE IN STOPES
(At 21 cu. ft. per ton)
Total by Veins

VEINS	Tons
Buena Ventura	325
Candelaria Group	1,485
Catalina	265
Colonia	300
Culebra	1,267
Fortuna	925
Independencia	1,556
Northwest	325
Rosario	2,204
Salvador	10,000
South San Miguel	262
South San Miguel Stringer	75
Santa Gertrudis	571
Chute No. 8	500
Chute No. 36	150
Chute No 51	150
Total	20,360

Annex "C"

Exploration and Development for the Year 1924

Location	Drifts	Winzes	Raises	Crosscuts	Total Feet
Buena Ventura	....	....	74.0	.....	74.0
Carmen	183.0	....	13.0	.....	196.0
Candelaria Group	222.5	....	16.0	125.0	363.5
Colonia	....	....	11.0	.....	11.0
Culebra	401.0	....	231.0	8.0	640.0
Esperanza Crosscut heading	....	....	.....	432.5	432.5
Esperanza Crosscut Stringer (Sta. 26)	58.5	....	.....	.....	58.5
Fortuna	519.5	15.0	130.0	71.5	736.0
Independencia	1,453.5	....	347.0	177.0	1,977.0
North	12.0	....	8.0	.....	20.0
Northwest	397.0	....	22.0	67.5	486.5
Rosario	237.0	....	238.5	39.0	514.5
Salvador	2,087.5	28.0	320.0	85.5	2,521.0
Santa Gertrudis	197.0	....	23.5	.....	220.0
South San Miguel Group	45.5	....	379.5	.....	425.0
Southwest	72.0	32.5	36.0	.....	140.5
Termopilas	258.5	....	307.5	.....	566.0
Totals	6,144.5	75.5	2,157.0	1,006.0	9,383.0

CONNECTIONS

Peña Blanca Adit Cut-off	226.5	..
Porvenir Adit to Esperanza Crosscut	185.5	
West Vein Cut-off	137.0	
Southwest Vein Cut-off	221.0	
Total	770.5	770.5
GRAND TOTAL		10,153.5

Annex "D"

ORE PRODUCTION 1924
(Dry Tons)

From Stoping Operations—	Jan.	Febr.	March	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Buena Ventura	13	85	20	.....	.....	.....	.....	195	170	238	123	62	906
Candelaria Group	261	258	223	.....	57	388	310	455	467	346	385	371	3,521
Carmen	197	171	158	.....	.....	64	33	43	56	83	41	95	941
Catalina	84	13	....	.....	.....	.....	61	172	135	88	.....	58	611
Colonia	....	8	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
Culebra	387	869	716	.....	21	400	513	472	435	313	382	212	4,718
Fortuna	154	262	310	.....	115	267	55	187	586	793	587	333	3,649
Independencia	203	266	650	.....	34	954	1,145	536	295	166	338	865	5,452
North	....	....	....	.....	.....	12	121	70	182	136	3	.....	524
Northwest	606	1,061	692	.....	72	235	230	199	166	265	124	99	3,747
Rosario	505	271	141	.....	36	.....	.....	75	233	310	84	7	1,662
Salvador	4,590	3,059	1,844	.....	966	2,591	4,632	5,414	3,236	2,182	1,945	2,415	32,874
South San Miguel Group	194	133	133	.....	33	11	53	39	181	254	187	450	1,668
Santa Gertrudis	....	270	230	.....	5	232	272	337	264	185	251	222	2,268
Southwest	....	....	....	.....	.....	.....	.....	.....	.....	.....	20	76	96
West	58	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
Totals	7,250	6,724	5,117	.....	1,339	5,154	7,425	8,194	6,406	5,359	4,470	5,265	62,703
From Development Excavations—													
Candelaria Group	....	....	54	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
Carmen	....	26	....	.....	.....	.....	.....	.....	.....	.....	.....	4	30
Culebra	47	20	23	.....	18	12	.....	9	20	129	73	47	398
Fortuna	159	153	161	.....	43	149	47	48	73	145	80	71	1,128
Independencia	195	159	131	.....	240	694	439	388	469	449	533	676	4,372
Northwest	....	....	....	.....	20	60	89	11	.....	9	.....	.....	189
Esperanza Crosscut Str. Sta. 26.	....	....	....	.....	.....	.....	23	19	.....	.....	.....	.....	42
Rosario	10	29	....	.....	.....	.....	.....	3	.....	.....	.....	.....	42
Salvador	403	360	438	.....	218	624	580	523	544	439	519	384	5,042
Santa Gertrudis	129	....	....	.....	.....	3	10	32	100	56	47	128	505
Southwest	....	....	....	.....	.....	.....	26	56	53	13	5	.....	153
Termópilas	....	40	30	.....	.....	.....	.....	49	116	102	104	.....	441
Totals	942	786	837	.....	549	1,542	1,214	1,138	1,375	1,342	1,361	1,310	12,396
From Stope Fills	142	....	....	.....	174	.....	57	.....	.....	.....	151	7	531
GRAND TOTAL	8,334	7,510	5,954	.....	2,062	6,696	8,696	9,332	7,781	6,701	5,982	6,582	75,630

Annex "E"

Tonnage Mined from October 1, 1907 to January 1, 1925

VEINS	Total including Stoping, Devel. & Filling Oct. 1/07 to Dec. 31/23	Total including Stoping, Devel. & Filling Year 1924	Grand Total including Stoping, Devel. & Filling January 1, 1925
Buena Ventura	95,431	1,064	96,495
Candelaria Group	157,917	3,632	161,549
Capitana	52,945	.....	52,945
Carmen	12,778	971	13,749
Catalina	2,347	611	2,958
Colonia	51,928	8	51,936
Concepción	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	57,162	5,116	62,278
Esperanza	8,666	.....	8,666
Fortuna	4,564	4,777	9,341
Guadalupe	60,875	.....	60,875
Independencia	912	9,824	10,736
Jucuara	2,207	.....	2,207
North	4,006	524	4,530
Northwest	70,543	3,936	74,479
Nueva	27,846	.....	27,846
Porvenir	959	.....	959
Rosario	135,309	2,020	137,329
Salvador	53,668	37,916	91,584
Santa Gertrudis	507	2,773	3,280
San Joaquin	63,030	.....	63,030
San Miguel (stringer)	2,625	.....	2,625
San Miguel North	174,801	.....	174,801
San Miguel South	87,306	1,668	88,974
Socorro	19,810	.....	19,810
Southwest	18,872	249	19,121
Termópilas	.....	441	441
West	96,475	58	96,533
Ore from Development	63,599	.....	63,599
Miscellaneous	715	42	757
Totals	1,354,383	75,630	1,430,013

Summary

October, 1907, to January 1, 1925

From Stoping	1,114,240
From Development	84,323
From Fills	231,450
Total	1,430,013

Condensed Balance Sheet

New York & Honduras Rosario Mining Company—

New York City

December 31, 1924

ASSETS

Permanent—		
Mines, Real Estate and Concessions	$3,000,000.00	
Plant, Buildings, Machinery and Equipment	$1,331,363.32	
Less: Allowance for Depreciation	798,410.16	
	532,953.16	
		$3,532,953.16
Current—		
Cash	115,978.03	
Loan Receivable plus Interest (Secured)	30,320.00	
Bullion at Smelters and in Transit at Market— Less: Allowance for Expenses	261,416.04	
Broken Ore in Stopes and Mill Bins at Cost	107,375.29	
Materials and Supplies at Cost	235,033.00	
U. S. Securities at Market plus Interest	466,562.69	
Marketable Securities at Market plus Interest	927,848.74	
		2,144,533.79
Other Assets—		
Investments—Capital Stock of Other Companies	51,853.00	
Advances to Other Companies—Less: Allowance for Shrinkage	4,842.70	
Loan to Government of Honduras—Balance	28,505.09	
Sundry Accounts Receivable	6,939.90	
		92,140.69
Deferred Charges—		
Prepaid Insurance, Taxes and Expenses		130,119.31
TOTAL ASSETS		$5,899,746.95

LIABILITIES

Current—		
Drafts Payable	50,197.47	
Accounts Payable	20,342.79	
Federal Income and Profits Taxes, prior years—Estimated	123,301.99	
Federal Income Tax—1924	68,718.30	
		$ 262,560.55
Reserves—		
Depletion of Mines	1,588,514.38	
Mine Fire Insurance	43,891.08	
Transit Insurance	10,879.70	
Dividends—Payable January, 1925	50,000.00	
		$1,693,285.16

Capital Stock—			
Authorized and Issued—200,000 Shares—Par Value of $10.00 per Share		2,000,000.00	
Surplus—			
Earned Surplus	$1,086,875.57		
Appreciation of Mine Valuation—			
Less: Depletion	857,025.67		
		1,943,901.24	
			3,943,901.24
			$5,899,746.95

Income and Profit and Loss Statement

New York & Honduras Rosario Mining Company

New York City—For the year ended December 31, 1924

Production of Gold and Silver	$1,584,610.32		
Less: Freight and Expenses on Bullion	70,056.26		
Operating Income			$1,514,554.06
Deduct: Operating Expenses			737,394.67
Operating Profit			$ 777,159.39
Deduct: New York Administrative Expenses			51,783.15
Net Profit from Operations			$ 725,376.24
Other Income			92,840.34
			$ 818,216.58
Other Deductions from Income			46,151.72
Net Profit Before Federal Income Tax and Provision for Reserves			$ 772,064.86
Federal Income Tax			68,718.30
Net Profit for Year			$ 703,346.56
Appropriated for Reserves—			
Ore Depletion	$ 203,034.72		
Mine Fire Insurance	5,577.59		
Transit Insurance	2,920.19		
			211,532.50
Profit for Year Carried to Surplus			$ 491,814.06
Surplus—			
Surplus, January 1, 1924	$1,783,223.72		
Additions—			
Increase in Market Values of Securities owned at Dec. 31, 1924	$ 21,363.46		

Deductions—			
Dividends Paid and Provided	$350,000.00		
Claim for Process Royalties applicable to prior years	2,500.00		
	$352,500.00	$331,136.54	$1,452,087.18
Surplus—December 31, 1924			$1,943,901.24

Auditors' Certificate

WE HEREBY CERTIFY that we examined the books of account and record of the NEW YORK & HONDURAS ROSARIO MINING COMPANY, NEW YORK CITY, for the year ended December 31, 1924 and, subject to the fact that we did not examine the records of the Mine Office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at December 31, 1924 and that the related Income and Profit and Loss Statement is correct.

Very truly yours,

(Signed) ERNST & ERNST.

(Seal)

New York & Honduras Rosario Mining Company

Comparative Statement of Net Assets

FOR THE YEARS ENDED DECEMBER 31st AS BELOW

	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
CURRENT ASSETS—												
Cash and Cash Items	$106,866	$90,618	$114,159	$259,461	$414,773	$361,399	$172,165	$470,377	$283,570	$308,423	$474,620	$146,298
Marketable Securities	.....	.....	.....	.....	100,791	323,500	208,800	179,822	408,485	564,611	546,239	1,394,411
Bullion in Transit	207,438	252,348	271,735	353,116	325,260	387,348	805,137	231,770	1,145	142,270	307,157	261,416
Ore in Stopes and Mill Bin	89,078	96,885	99,952	122,873	121,172	112,126	95,134	120,978	114,217	91,467	88,245	107,375
Materials and Supplies	250,469	272,807	292,732	300,761	427,909	401,343	329,101	403,393	308,464	191,772	210,782	235,033
Total Current Assets ..	$653,851	$712,658	$778,578	$1,036,211	$1,389,905	$1,585,716	$1,610,337	$1,406,340	$1,115,881	$1,298,543	$1,627,043	$2,144,533
Deduct: Current Liabilities	91,344	71,139	59,027	257,499	567,784	694,372	522,062	199,069	218,387	218,305	205,153	262,560
Net Current Assets	$562,507	$641,519	$719,551	$778,712	$822,121	$891,344	$1,088,275	$1,207,271	$897,494	$1,080,238	$1,421,890	$1,881,973
OTHER ASSETS—												
Accounts Receivable, Investments, Deferred Charges, etc.	42,277	43,330	43,727	170,019	250,098	237,026	368,378	144,173	178,546	269,179	312,547	222,260
PERMANENT—												
‡Mines, Real Estate, Concessions, Buildings, Machinery, etc. (less Allowances for Depreciation).	2,415,197	2,371,513	2,352,400	2,308,444	2,062,112	2,213,070	2,188,829	2,134,275	2,116,892	2,080,317	2,030,539	2,032,953
*Total Net Assets	$3,019,981	$3,056,362	$3,115,678	$3,257,175	$3,134,331	$3,341,440	$3,645,482	$3,485,719	$3,192,932	$3,429,734	$3,764,976	$4,137,186
Increase of Net Current Assets over Preceding Year..	.....	$79,012	$78,032	$59,161	$43,409	$69,223	$196,931	$118,996	†$309,777	$ 182,744	$341,652	$460,083
Increase of Net Current Assets over December 31, 1913	.....	$79,012	$157,044	$216,205	$259,614	$328,837	$525,768	$644,764	$334,987	$517,731	$859,383	$1,319,466

* Represented by Capital Stock, Surplus, Reserves for Depletion, Exchange Fluctuation, Contingencies, etc., with no adjustment for increased valuation of mines, etc.

† Decrease

‡ Not adjusted for increased valuation of mines.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
	$34,428,008.16

Distribution to Stockholders

1887	No. 1	$37,500— 2½% Dividend
1888	Nos. 2 to 5	60,000— 4% Dividend
1889	Nos. 6 to 14	150,000—10% Dividend
1891	Nos. 15 to 16	30,000— 2% Dividend
1892	Nos. 17 to 21	165,000—11% Dividend
1893	Nos. 22 to 25	150,000—10% Dividend
1894	No. 26	37,500— 2½% Dividend
1896	Nos. 27 to 28	30,000— 2% Dividend
1897	Nos. 29 to 40	180,000—12% Dividend
1898	Nos. 41 to 48	120,000— 8% Dividend
1899	Nos. 49 to 60	180,000—12% Dividend
1900	Nos. 61 to 75	225,000—15% Dividend
1901	Nos. 76 to 93	300,000—20% Dividend
1902	Nos. 94 to 100	105,000— 7% Dividend
1903	No. 101	15,000— 1% Dividend
1904	Nos. 102 to 108	105,000— 7% Dividend
1905	Nos. 109 to 121	180,000—12% Dividend
1906	Nos. 122 to 139	285,000—19% Dividend
1907	Nos. 140 to 153	210,000—14% Dividend
1908	Nos. 154 to 165	180,000—12% Dividend
1909	Nos. 166 to 173	120,000— 8% Dividend
1910	Nos. 174 to 180	105,000— 7% Dividend
1911	Nos. 181 to 182	90,000— 6% Dividend
1912	Nos. 183 to 184	70,000— 3½% Dividend
1913	Nos 185 to 188	180,000— 9% Dividend
1914	Nos. 189 to 193	240,000—12% Dividend
1915	Nos. 194 to 197	240,000—12% Dividend
1916	Nos. 198 to 205	400,000—20% Dividend
1917	Nos. 206 to 211	300,000—15% Dividend
1917	No. 1	100,000— 5% Amortization
1918	Nos. 212 to 215	200,000—10% Dividend
1918	Nos. 2 to 5	200,000—10% Amortization
1919	Nos. 216 to 219	200,000—10% Dividend
1919	Nos. 6 to 9	200,000—10% Amortization
1920	Nos. 220 to 225	320,000—16% Dividend
1920	Nos. 10 to 11	80,000— 4% Amortization
1921	No. 226	60,000— 3% Dividend
1922	Nos. 227 to 229	150,000— 7½% Dividend
1923	Nos. 230 to 234	250,000—12½% Dividend
1924	Nos. 235 to 240	350,000—17½% Dividend
	Total	$6,600,000

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00

Dividends 183 to 240, inclusive, were paid on Capital Stock of 2,000,000.00

Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of ... 2,000,000.00

REPORT of the

NEW YORK & HONDURAS ROSARIO MINING CO.

1925

NEW YORK

January 1, 1926

OFFICERS 1926-1927

LEWIS L. CLARKE, *President.*

H. A. GUESS, *Vice-President.*

A. R. GORDON, *Vice-President.*

W. C. LANGLEY, *Treasurer.*

J. PERLMAN, *Secretary.*

BOARD OF DIRECTORS 1926-1927

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY,	W. C. LANGLEY,
LEWIS L. CLARKE,	W. L. SAUNDERS,
H. A. GUESS,	E. V. SOTO,
IRVING HEIDELL,	AMBROSE G. TODD,
DR. J. RALPH JACOBY,	DR. JULIUS J. VALENTINE,

P. R. WEILER.

EXECUTIVE COMMITTEE 1926-1927

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY,	W. L. SAUNDERS
H. A. GUESS,	AMBROSE G. TODD,

P. R. WIELER.

LEWIS L. CLARKE, W. C. LANGLEY } *Ex-Officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company

New York, January 1, 1926.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

This Company is most fortunate in being able to record another year of excellent business and continued progress in efficiency and production. The output of silver has steadily increased, as shown by the following results:

1923	2,038,210.85 ounces
1924	2,189,903.69 ounces
1925	2,431,926.17 ounces

The output of gold has been declining since 1919, *having fallen from* 10,173 *ounces in that year to* 3,995 *ounces in* 1925.

Our operations during 1925 *have proceeded with little interruption and may be said to have been almost normal. The difficulties in respect to labor supply, to which reference was made in my last annual report, have been overcome to a great extent. This has permitted more intensive work underground than was possible during the years* 1923 *and* 1924. *During the last year there has been a constant effort to maintain the Company's property in a high condition for service; a new process aiming at a greater cyanide recovery, which should produce a material saving in the outlay for that commodity, is in course of installation, and will be put in operation during* 1926. *The details regarding these and many other important subjects will be treated at length in the report of the General Manager, which will be sent to you as soon as possible.*

May I direct your attention to the fact that an important element in the favorable showing indicated in the following figures is the price realized for our silver product, which was $.6910 *per ounce, or an increase of* $.0084 *per ounce over the price realized in* 1924. *Expressed in dollars, this amounted to* $20,428.18.

I now desire to present to you the figures relating to the essential features of our operations:

	1925	1924	1923
Dry tons treated	105,850.	75,710.41	87,900.
Ounces silver produced (Smelter's final returns)	2,431,926.17	2,189,903.69	2,038,210.85
Ounces gold produced (Smelter's final returns)	3,994.367	4,339.234	4,681.21

Bars Doré Bullion	1,498	1,455	1,338
Drums Precipitates	48	4	0
Average silver recovery at Mine (per cent)	91.93	90.68	89.39
Average gold recovery at Mine (per cent)	93.89	94.61	92.64
Averages ounces silver recovered at Mine (per ton)	23.052	28.886	23.146
Average ounces gold recovered at Mine (per ton)	.0384	.0585	.0532
Value per ounce of silver sold	$ .6910	$.6826	.$.65015
Value of silver recovered (per ton)	15.8758	19.7452	15.0756
Cost of silver recovered (per ton)	8.8779	10.1643	8.2181
Cost of silver recovered (per ounce)	.3864	.3514	.3544
Net profit on silver recovered (per ton)	6.9979	9.5809	6.8575
Net profit on silver recovered (per ounce)	.3046	.3312	.2957

The net Operating Income for the year was	$1,697,847.71
Less: Operating Expenses	894,830.04
Operating Profit	803,017.67
Less: New York Administrative Expenses	62,288.60
Net Income from Operations	740,729.07
Miscellaneous Income	90,682.70
	831,411.77
Less: Miscellaneous Expenses	67,226.70
Net Profit for Year	764,185.07
Less: Appropriated for Reserves	232,477.24
Net Profit Before Taxes	531,707.83
Less: Federal Income Tax	50,998.41
Net Earnings for Year	480,709.42
Applied to Dividends	400,000.00
Carried to SURPLUS	$ 80,709.42
Current Assets December 31, 1925, were	$2,591,623.89
or an increase over the preceding year of	447,090.10

These are as follows:

Cash	$ 84,457.50	
Loans Receivable, plus Accrued Interest	100,292.64	

Bullion at Smelters and in transit	263,333.94	
Broken Ore in Stopes and Mill Bin	77,385.70	
Materials and Supplies at cost	247,461.54	
U. S. Securities at Market, plus Accrued Interest	472,356.28	
Marketable Securities, plus Accrued Interest	1,346,336.29	
		$2,591,623.89

There were appropriated for Reserves:

Mine Fire Insurance	$ 6,076.74
Transit Insurance	3,211.21
Ore Depletion	223,189.29
	$232,477.24

Current Liabilities at December 31, 1925, were ... $ 278,038.63
or an increase of ... 15,478.08

These Liabilities include $123,301.99 to cover Federal Income and Profit Taxes for the years 1918, 1919, 1920, and $50,998.41 for Federal Income Tax for 1925, a total for Taxes of $174,300.40.

The ratio of Current Assets to Current Liabilities is 9.321 to 1.

Sabana Grande-Honduras Mining Company

The work at this property during the past year has not enabled us to form at this time any definite opinion as to the future of this enterprise. The unwatering necessary to permit the operators to reach a known body of ore in the old works, estimated at about 50,000 *ounces silver, had not been finished at the close of* 1925. *From all information obtainable, it is not believed that there are any additional material deposits in the old works. Operations were undertaken during the year, to carry our explorations into new territory, with a view to determining its possibilities, if any.*

Expansion

We have carried on operations at four different properties during 1925. *Only at one, the Aurora-Santa Elena, is there any basis at the present time for anticipating further results. The costs directly chargeable to our Expansion operations for* 1925 *amount to* $31,910.05.

Board of Directors

I regret to report that on February 25th, 1925, Mr. J. C. F. Jacoby, for twelve years a member of our Board, departed this life. Mr. Jacoby was always a devoted and zealous stockholder and director of the Company.

Government of Honduras

We wish to extend our thanks to the Government of Honduras for the courtesies extended to us.

Audit

The books of the Company have been audited by Messrs. Ernst and Ernst, and their report has been filed with us.

Respectfully submitted,

LEWIS L. CLARKE,
President.

ANNUAL REPORT OF THE GENERAL MANAGER

San Juancito, Honduras, C. A., January 1, 1926.

To the President:

New York & Honduras Rosario Mining Company,
New York, N. Y.

Dear Sir:

The operations on the Company's property in Honduras during the fiscal and calendar year 1925 are covered in brief detail in the following report:

Production

	1925	1924
Dry tons treated	105,850	75,710
Averaging per ton—Troy ounces silver	25.075	31.855
Averaging per ton—Troy ounces gold	.0409	.0618
Total ounces silver produced	2,440,042	2,186,991
Total ounces gold produced	4,062	4,426
Ratio of silver to gold	601 : 1	494 : 1
Bars Doré Bullion	1,498	1,455
Bullion fineness, silver	960.75	929.05
Bullion fineness, gold	1.60	1.88

The 1925 Silver production exceeded that of 1924 by 253,051 ounces, establishing a new yearly production record for this metal. It was not possible to work the Gold bearing sections of the Mine

to the extent anticipated and it is due mostly to this that less Gold was produced in 1925 than in 1924.

The prospect for a more or less equal Silver production in 1926 is favorable, and as more extensive work in the Gold bearing sections of the Mine is planned, the Gold output in 1926 should exceed that of 1925.

The probabilities are that the 1926 production will result from a larger tonnage of lower grade ore.

Honduras Operating Costs

Basis:	1925	1924
Dry tons milled	105,850	75,710
Troy ounces silver produced	2,440,042	2,186,991
Troy ounces gold produced	4,062	4,426
Total Troy ounces bullion produced	2,444,104	2,191,417

Mine	Total Costs		Per Ton		Per Troy Ounce Fine Bullion Produced	
	1925	1924	1925	1924	1925	1924
Labor	$235,423.55	$180,323.60	$2.22	$2.38	$.0965	$.0824
Supplies	167,928.24	125,184.97	1.59	1.65	.0688	.0572
Power	8,410.08	7,395.95	.08	.10	.0034	.0034
Total	$411,761.87	$312,904.52	$3.89	$4.13	$.1687	$.1430
Mill						
Labor	$ 53,439.31	$ 53,082.71	$ .51	$ .70	$.0219	$.0243
Supplies	212,819.04	192,188.59	2.01	2.54	.0872	.0878
Power	13,162.03	10,567.58	.12	.14	.0054	.0048
Total	$279,420.38	$255,838.88	$2.64	$3.38	$.1145	$.1169
Honduras Administration	123,474.38	121,258.72	1.17	1.60	.0506	.0554
Totals	$814,656.63	$690,002.12	$7.70	$9.11	$.3338	$.3153
Credit value of gold produced	$ 81,250.66	$ 88,520.00	$ .77	$1.17	$.0333	$.0403
Net costs	$733,405.97	$601,481.12	$6.93	$7.94	$.3005	$.2750
Cost per ounces bullion produced	$.3005	$.2750				

FINANCIAL

Exchange

	1925	1924
Drafts on Treasurer during the year	$ 578,587.76	$465,152.52
Yield in Pesos	1,205,474.32	966,002.19
Rate of Exchange, average for the year	208.348%	207.674%

Exchange Earnings on Basis of Prescribed Rate of Exchange of 200%	$ 24,149.40	$ 17,848.57
Lowest Rate of Exchange during 1925	206.00%	(January)
Highest Rate of Exchange during 1925	214.00%	(December)
Rate of Exchange as of December 31, 1925	212.00%	

THE MINE

Ore Reserves

The ore reserve existing in each vein is shown on Annex "A," of which the following is a summary:

Summary

	Tons of Ore and Waste	Ozs. Ag. Per Ton	Ozs. Au. Per Ton	Total Ozs. Ag.	Total Au. Ozs.
Calculated ore, at 13 cu. ft.	228,300	24.23	.0485	5,532,500	11,073
Estimated ore, at 13 cu. ft.	44,000	12.88	.0611	566,500	2,690
Estimated stope filling, at 17 cu. ft.	10,000	10.00	.0355	100,00	355
Broken ore in stopes, at 21 cu. ft.	16,046	22.72	.0429	364,565	688
Totals	298,346	21.999	.04996	6,563,565	14,806

Compared with those of a year ago, the present reserves, as of December 31, 1925, show a decrease of 690,635 ozs. Silver, 411 ozs. Gold. Considering, however, that no new veins, as yet indicating large quantities of ore in prospect, have been discovered, and 2,654,230 ozs. Silver, 4334 ozs. Gold were mined in 1925, the present reserves should be looked upon as satisfactory. With no new veins in which to develop untouched high grade ore resources, and development confined only to veins which have been in production some time, the proportion of high grade ore found in 1925 was less, therefore, the average value of the total reserves is lower by 1.54 ozs. Silver as compared with those of December 31, 1924. Calculations of the present reserves are based on a Silver price of 65c per Troy Ounce and Gold at $20.65, silver recovery being estimated at 92% and Gold at 94%.

ORE PRODUCTION

The 105,864 tons of ore sent to the Mill were obtained as follows:

	1925	1924
By Stoping	85,876 tons	62,703 tons
From Development Excavations	19,364 tons	12,396 tons
Stope Filling	624 tons	531 tons
Total Sent to Mill	105,864 tons	75,630 tons
Number of Producing Veins	19	17

Annexes "D" and "E" show ore production by veins, the former for the year 1925, the latter since October, 1907.

	1925	1924
Number of shifts worked	307	305
Average number of men per shift including top men	498	402

As the above comparison indicates, underground labor was more plentiful in 1925, this occurring in the latter part of the year. Full advantage was taken of this situation to put working stopes into better shape for cheaper production and to prepare new stoping ground in advance of ore requirements so there be less effect on production should there be recurrence of labor shortage. If the same satisfactory labor conditions prevail in 1926, it is planned to prepare for production sections in some of the old veins where important quantities of ore are believed to exist. While the cost of such preparatory work will be a current item of expense, results therefrom in the shape of ore to the mill will not be forthcoming, in some cases, for perhaps a year or more.

The new mine, the Esperanza section, produced 60% of the ore in 1925 as against 71% in the previous year. The desire is to have the old and the new mine produce about equally; but it will depend largely on the amount of work in the old mine it will be possible to do and also on the price of Silver if this end is realized. Two more veins were in production in 1925 than in 1924, and if conditions are such as to permit the carrying out of the present plans, even more veins should yield ore in 1926.

EXPLORATION, DEVELOPMENT AND MINING

Detailed distribution of the footage driven in 1925 is shown in Annex "C" of which the following is a comparative summary with the year 1924:

Summary

	Drifts	Winzes	Raises	Cross-cuts	Total Feet
1924	6,144.5	75.5	2,157.0	1,776.5	10,153.5
1925	8,222.5	32.5	3,273.0	3,404.0	14,932.0

Excepting 378.5 ft., all remaining footage driven had as its object exploration for new veins and development of existing ones. About 90% of the cross-cut footage represents exploration work and it will be noted that in 1925 this was nearly double that of the year previous.

Mining operations were carried on in 19 veins during 1925, the most important work being reviewed briefly under the following headings:

Buena Ventura Vein

It is still possible to report the same reserve value and tonnage as a year ago, despite an ore production of 1049 tons in 1925. The 116 ft. of development represented work of mining pillars of ore in the old workings, mostly below the Upper 150 level. The ore mined in 1925 was of considerably better grade than the general reserve average of 12 ozs. Silver and .06 ozs. Gold. It is probable than the output from this vein in 1926 will be more or less equal to that of 1925.

Candelaria Group

Owing to the old workings being in much worse condition than anticipated, it was not possible to reach the territory where a substantial quantity of low grade but cheaply mined and easily treated ore is expected. It is probable that another year's work will be required before the objective is reached as, instead of recovering the old workings, it will be necessary to drive tunnels around them. 436.5 ft. were driven in connection with the above work in 1925.

The Candelaria and its branches have been exploited but little above the Upper 500 level. As the intervening territory between this level and the surface is quite extensive and entirely unexplored, the possibility of ore occurrence is considered good. If labor conditions permit and the current amount of unproductive work in other sections of the mine be not too great, it is proposed to start developing this territory sometime in 1926.

1152 tons of ore were mined in 1925, the average grade of which was better than that shown in the 1924 report. The present ore reserve stands the same as that given in the 1924 report.

Capitana Vein

No work has been done in this vein in 1925. At the Upper 350 level, however, a drift is being driven in the San Vicente vein toward the Capitana. When connection is made with the Capitana Upper 350 level, it is proposed to stope a block of ore existing there and eventually reach the Upper 550 level, where a small quantity of ore also exists. It is probable, therefore, that the Capitana will be an ore producer in 1926.

Carmen Vein

Development consisted of 214 ft., all of it being done at the Upper 550 level to locate the vein. It will be recalled from previous

reports that the intersection on the dip, between the Carmen, Fortuna and Salvador veins is assumed in the vicinity of the Upper 550 level. Past years work was on two low grade stringers off the Fortuna vein, either of which may be the Carmen. Further work on these is necessary to learn if the Carmen and the rich ore it carries on the lower levels actually exists at the Upper 550 level.

The ore output of 2659 tons is substantially greater than that of 1924, and came in about equal quantity from the Upper 150 and the Upper 350 levels, with a small amount from the Upper 450.

The ore reserve, it will be noted, is of important quantity and high grade, but owing to the loose character of the ground, waste fill stoping must be resorted to; therefore, no heavy daily output of ore can be expected and mining costs are apt to be above the average.

Catalina and North Veins

The similarity in character and other features obtaining in these two veins and the plan to bring each into production again were covered in detail in the 1924 report.

No development has been done in the Catalina and only 49 ft. driven in the North, but the ore output from the Catalina amounted to 1540 tons, all of it from the Upper 150 level. The plan to revive these two veins is to continue but the amount of development and ore production will be governed mainly by the extent of similar work in progress in other sections of the Mine.

In the coming year driving is to be done on the Catalina to the south at the Upper 250 and Upper 350 levels, where ore possibilities are considered fair.

Colonia Vein

Connection by means of a raise was made between the Lower 650 and the Lower 300 Levels. In the last 100 ft. of the raise the vein became ore bearing, and while no lateral development has as yet been done, it is believed that an important quantity of low grade ore, with occasional rich pockets, will be obtained from this section. The connection gives ready access to the Colonia Mine and reduces haulage costs quite materially, the ore now dropping directly to the Lower 650 electric haulage. Stoping is to be done at the Lower 300 level and also at the levels above as soon as these can be gotten ready.

Culebra Vein

This vein at present is the best source for cheaply mined low grade ore and, occasionally, rich pockets. Development during the

year was heavy, consisting of 1716 ft. as compared with but 610 ft. in the year previous, and ore production was 12,116 tons as compared with 5116 tons. Low grade ore was found on the Upper 500 and Upper 250 and Upper 150 levels, but, on the whole, that on the last two levels is a disappointment due to the ground being faulted and the metal content erratic.

In the 1924 report it was mentioned that the existence of a branch vein was suspected and that work would be started to find it. Cross-cuts were started on the Upper 350 and Upper 500 levels with this end in view and they should reach their objective sometime in 1926. The chances of finding ore here are very good.

As a result of the 1925 development the present ore reserves stand at 20,000 tons, averaging 16 ozs. Silver, .05 ozs. Gold, or only 2000 tons less than the year previous, despite an ore production of 12,116 tons.

Fortuna Vein

Nearly all past year's development, which consisted of 586 ft., was done at the Upper 550 level, with the object of establishing the relationship between the Carmen, Fortuna and Salvador veins, all of which form junction on their respective dips in the vicinity of this level. Driving was done on a strong vein which probably is the Fortuna and an important quantity of good ore disclosed. A raise is now being driven to determine the vertical extent of this ore and from information available at the present time, there is every reason to believe that its continuance can be expected for at least 100 ft. above the Upper 550 level. A new level, the Upper 650, is to be started sometime in 1926.

As a result of past year's development, the ore reserve is 16,000 tons or 1000 tons more than in 1924, even though 4732 tons were mined during the year. The grade, however, is slightly lower, or 22 ozs. Silver, .03 ozs. Gold, as compared with 24 ozs. Silver, .03 ozs. Gold.

Independencia Vein

This vein was described in detail in the 1924 report. In 1925 its development consisted of 4092.5 ft., being more than double that in the year previous. It confirmed what had been suspected, that to the southeast, and when looser ground was entered, the vein would become less constant and material diminution in value occur. Past year's work in this section of the vein was mostly in stringers, erratic in value and strike. Recently, a low grade vein with about a 45° dip was picked up. If it proves persistent it is to be developed during the coming year. The chances of the

ground in this section of the Mine becoming harder and less broken up are not good, but should this occur and the vein continue in the hard ground, substantial increase in the value content is looked for.

Development to the west has been rather disappointing because while some good grade ore was found, it lacks continuity due to the broken up character of the ground. Work in a westerly direction on the Upper 150 level has been stopped pending the outcome of work in the same direction on the upper levels.

Considerable work was done to explore the upper reaches of the vein, directly above the very rich ore on the Upper 150 and Upper 250 levels. Present indications are that this ore does not extend much above the Upper 250 level, but further exploration is necessary before this is definitely established.

For the purpose of much needed ventilation in the Independencia vein workings and the Esperanza Section in general, a raise is being driven to connect with the surface. This work should be concluded in the Spring of 1926.

The best ore of the Independencia at the present time exists in the floor of the Upper 150 level. This section of the vein is to be quickly developed as soon as the Lower 650 Esperanza Cross-cut intersects the vein. The distance still lacking before the Cross-cut reaches this objective is, roughly, 2540 ft. (on January 1, 1926).

The ore output during 1925 was 13,574 tons, the average grade of which was very much better than that from any other vein mined during the year.

In view of what has been said in the foregoing covering development results and the heavy production of best grade ore in the past year, it was necessary to drop the average value of the reserve.

Northwest Vein

This old vein was even a larger producer in 1925 than in the year previous. The ore reserve for 1925 stood at 4000 tons, estimated at 14 ozs. Silver, .05 ozs. Gold, but in that year actually 4391 tons were mined and the average value of this ore was considerably above that of the reserve. The ore came almost entirely from one isolated stope above the Upper 500 level and indications at the present writing are that about as much ore as was mined last year can be looked for. Ore production from the stope referred to will have to be suspended pending cheaper and safer working arrangements, as its height above the Upper 500 level is over 225 ft. and the walls are loose.

Development consisted of 125.5 ft. driven on a sublevel 85 ft. below the Zero level to open up an isolated pocket of ore. The ore reserve is again estimated at 4000 tons averaging 14 ozs. Silver, .05 ozs. Gold.

Rosario Vein

The ore output was 6081 tons, or three times that of the year previous, the ore generally being well above the estimated reserve average. Development consisted of 874.5 ft. and was devoted entirely to making available for mining isolated bunches of ore in the old workings on several levels.

As there is every indication that more ore exists in the old workings, the reserve estimate stands the same as in the previous year, namely, 7000 tons, averaging 12 ozs. Silver, .06 ozs. Gold.

Salvador Vein

Making comparison with 1924, development consisted of 2710.0 ft. against 2511.0 ft.; ore production 42,896 tons against 37,916 tons, and ore reserves as of December 31, 1925, stand at 80,000 tons, averaging 26 ozs. Silver, .03 ozs. Gold, compared with 90,000 tons avering 28 ozs. Silver, .03 ozs. Gold, on December 31, 1924. It will be observed that 1925 development proved fairly responsive, as despite an output of 42,896 tons of ore in that year, the ore reserves are not much below those for 1924.

Though not definitely proven, there are indications from last year's work that the lateral limits of the vein in its upper reaches will be less extensive than on the lower levels. Also, it has been established that the Carmen, Fortuna and Salvador veins, each extend above their combined dip junction at about the Upper 550 level. This discovery, besides being a favorable one, is very important, as there now will be three veins above the Upper 550 in which to search for ore, instead of one.

At the Upper 150 level driving was done on what probably is one of the southern extensions of the Salvador, but with no results, therefore work was stopped. The ground is soft and loose and so long as these conditions obtain no ore is expected. A Cross-cut is being driven south on the chance that either another series of veins or extensions of those intersected by the Esperanza Cross-cut south of the Independencia will be picked up.

At the Zero level the southeast heading was advanced 211.5 ft., all in good grade ore of three foot width. The winze was sunk to a depth of 57 ft., the ore at the bottom being of about the same width and value as that on the Zero level.

The ore on the Upper 150 level is extending downward to at least the Zero level, and as there still is considerable ore bearing territory on the Upper 150 level under which the Zero southeast heading must traverse, a large ore tonnage is expected.

Some driving was done on the vein to the Northwest at the Upper 250 level, but results were disappointing and the work stopped. Another attempt to explore the vein in this direction is to be made at the Upper 350 level where conditions appear more favorable.

Past year's work has further confirmed the existence of a double vein on some of the levels, both veins frequently being ore bearing. Branch stringers or veins also have been found, some of which warrant exploration.

As soon as the Lower 650 Esperanza Cross-cut intersects the Salvador, which, at the rate the Cross-cut is being driven at the present time, should be in the latter part of 1926, the vein is to be developed as rapidly as possible from this point. For this reason the Upper 150 Shaft is not being sunk deeper.

Santa Gertrudis Vein

The output in 1925 was more than double that of 1924, being 5961 tons against 2773 tons. Of the 593 ft. of development, 466 ft. was in drifting on the Upper 150 and Upper 250 levels to the south. Most of this work was in ore, that on the Upper 250 being of better grade. As soon as the two raises now being driven are high enough, the Upper 350 level is to be established and development continued above it. The indications today are that the ore at the Upper 350 level will be lower in grade than that at the Upper 250 level. Driving is to be done northward on the Upper 250 level to look for ore and to connect with the Southwest vein workings, removing any ore remaining there through the Santa Gertrudis. No work is to be done at the Zero level until sinking the Southwest vein shaft below the Zero level is completed.

Despite heavy ore production in 1925, the present ore reserve stands at 11,500 tons, averaging 22 ozs. Silver, .03 ozs. Gold, being of the same value and 1500 tons more than in the previous year.

San Vicente Vein

The heading on the Upper 350 level was advanced 349 ft. to the northwest to develop the vein. The ore found is in a vein less than 0.8 ft. wide and on the whole too low in grade to be mined at present. The drift will serve to connect with the Capitana and North San Miguel workings where ore exists. The connection should be made early in 1926.

South San Miguel Group

In accordance with the plan indicated in the 1924 report work was continuous in the South San Miguel vein and its branches in 1925. Ore production consisted of 7240 tons compared with 1668 tons in the year previous but it was not possible to do as much development work as desired, this amounting to only 146 ft.

The vein has possibilities to the southeast and these are to be exploited by drifting on the vein in that direction at the Upper 350 level. It is planned to start this work in 1926, labor and other conditions permitting.

Though development was very small and stoping comparatively heavy in the past year, unlooked-for ore resources have been discovered with the result that the present ore reserves are 30,000 tons, averaging 17 ozs. Silver, .06 ozs. Gold, compared with 31,500 tons, averaging 16 ozs. Silver, .06 ozs. Gold in 1924.

Southwest Vein

The 1330 tons of ore mined in 1925 came from the drift run on the vein to the Northeast at the Upper 150 level. No more ore from this section at the Upper 150 level is expected but prospects for its continuance at the Zero and Upper 250 levels are considered fair.

The shaft is being put in shape for further sinking, the object being to reach the lower limits of the ore body and remove it from that point.

The ore reserves are the same as a year ago, namely, 8000 tons averaging 18 ozs. Silver, .04 ozs. Gold. It can be assumed that in mining this ore rich pockets will be encountered which should raise the average grade considerably.

Termopilas Vein

Development in this vein has so far proved disappointing, the raise, now nearly 300 ft. above the Upper 150 level, and the two drifts, having disclosed no fairly continuous ore body but only low grade pockets.

It is believed, however, that an important ore body exists higher up, therefore the raise is to be continued.

Ore production was 227 tons, development 138 ft. The ore reserve estimated remains the same, namely, 2000 tons, averaging 16 ozs. Silver, .09 ozs. Gold.

Veins Not Worked in 1925

San Joaquin, Capitana, Socorro, Nueva, North San Miguel Group, Concepcion, Crisanta, Jucuara, Guadalupe.

If labor and other conditions are favorable in 1926, it is planned to do work in the following:

San Joaquin, Capitana and Nueva. These are veins, particularly the first two, in which the ratio of Gold to Silver is much higher than in any of the others.

Upper 150 *Esperanza Cross-cut*

At the present time this is the most important exploration project in the Mine. The 462. ft. of advance made in 1925 was through the ore bearing rhyolitic rock which, on the whole, was more fractured, coarser in texture and somewhat softer. Several stringers were intersected and though two or three show possibilities of commercial ore they do not have workable width at the point of intersection. As has been mentioned in previous reports, the pinching and swelling of veins from an inch streak to several feet in width, accompanied in either case by the occurrence or absence of ore, is common in this mine. Therefore, it is not impossible that some of the stringers intersected by this Cross-cut in the past year, and before, may, upon further exploration, develop into valuable veins.

Lower 650 *Esperanza Cross-cut*

In the 1924 report it was stated that the purpose of this Cross-cut is to facilitate and cheapen all mining operations to be done in the very extensive ore bearing territory below the Upper 150 level in the Carmen, Fortuna, Salvador and Independencia veins.

The approximate length of the Cross-cut from the Rosario vein, in Block 45, to the Independencia, is about 4200 ft. The total distance driven up to December 31, 1925, is 1645.5 ft., of this 1532 ft. were driven in 1925. Power shortage in the dry season and large flows of water have retarded work greatly and while further heavy flows of water are expected it is believed better progress will be made in 1926.

FUTURE EXPLORATION AND DEVELOPMENT

Most of the work outlined under this heading in the 1924 report is being carried out and with the success as indicated under the various vein headings.

To list all places where work could be done would be beyond the scope of this report. Howevear, so far as immediate work is concerned, the following should be started in 1926:

South Cross-cut

Drive south off the Upper 150 Salvador vein, starting in Block 66. There are possibilities of intersecting a new series of veins, also extensions of some of those already intersected by the Esperanza Cross-cut.

West Cross-cut

Drive westerly at the Upper 150 level, starting in Block 71, off the Southwest vein to explore territory between the Southwest and North San Miguel veins.

MINE EQUIPMENT

Air Compressor Plant

Two Ingersoll-Rand P.R.E. Type remodeled compressors of 2120 cu. ft. free air per minute capacity each, and each direct connected to a 415 H.P. Induction Motor.

One Ingersoll-Rand Imperial Type 950 cu. ft. per minute capacity compressor direct connected to a 175 H.P. Synchronous Motor.

The plant continued to render efficient service, there being no shut-down during the year which could be laid to trouble with the compressors.

Shifting ground on which part of the building and compressors rest necessitated construction, from bed rock, of reinforced concrete piers and arches to prevent the building and machinery getting out of further alignment and causing a very serious shut-down of the property. Other necessary repairs consisted of complete replacement of cooling water piping and construction of new air intake conduits to replace those damaged by the shifting ground. The air discharge piping in the plant is to be more efficiently arranged and aftercoolers are to be installed, the latter so that dryer air be supplied to the drills, thereby increasing their life and efficiency.

The repairs and improvements just described will, when completed, involve considerable expense. But it is the first expense of this nature in the 16 years of continuous operation of this plant. When the work is completed the plant should be in condition to render efficient and economical service for a long time to come.

Rock Drills

A stoping drill, specially developed to meet mining conditions in very narrow vertical stopes, was put on trial during the year.

After five months' service it is proving quite satisfactory, therefore it is probable it will be adopted for use in about 60% of the stopes.

Pipe Lines

More favorable labor conditions in the latter part of the year permitted doing the most urgent repair work on underground piping, with the result that this now has fewer leaks than for some time.

The main pipe line, 9⅝" diameter and 3150 ft. long, is in deteriorated condition, but by replacement of the worst sections, it should be serviceable for some years to come.

An independent pipe line of 6", 4" and 3" diameter and 4720 ft. long was laid underground from the Compressor Station at Peña Blanca to the projected Lower 650 Esperanza Cross-cut. When the Cross-cut is completed this pipe will be available for stock.

Electric Haulage

Electric Haulage Equipment on the Upper 150 Peña Blanca and Lower 650 Rosario levels consists of about 40,000 ft. of 24" gauge, 35 lb. rail track, overhead trolley, and six electric locomotives. It was possible to do considerable replacement and repair work to the track, this now being in fair shape. There was some trouble with locomotives at the Peña Blanca haulage, but with better supervision of their maintenance when the new locomotive repair shop is put in service, this should be greatly reduced.

Hand Haulage

On this haulage also it was possible to make some substantial repairs. All new track laid is of 18" gauge, that of 16" gauge being changed to 18" as quickly as circumstances permit. All cars of variable size and type, as they wear out, are replaced by a standard 16 cu. ft. car. The advantage gained in this is the interchangeability of parts, also that the men now have to become familiar with the "heft" and upkeep of only one type of car.

Operation of hand haulage being purely a physical effort, poor track and cars very quickly result in lower tonnage handled and higher costs. Therefore, every effort is made to keep this haulage in best shape.

Mine Office and Warehouses

The construction of the Mine Office and Warehouses at the Peña Blanca level should be completed early in 1926. This construction consists of the following:

Mine Office	31 ft. x 18 ft.
Shifters Lunch Room	21 ft. x 11 ft.
Warehouses for:	
Carbide and Fuse	31 ft. x 19 ft.
Machine Drills and Parts	25 ft. x 15 ft.
General Tools	30 ft. x 13 ft.
Locomotive Shed	35 ft. x 16 ft.
Locomotive Repair Shop	30 ft. x 16 ft.

These buildings are single story, of wooden frame, corrugated iron siding and roof, and no inside lining, excepting the Mine Office, which is lined with matched lumber.

A 40 ton capacity Dynamite Magazine was constructed and put in use in 1925. In selecting its location full consideration was given to minimum damage resulting in the event of an explosion. Two small magazines are to be built in the vicinity of the warehouses, one for storage of Blasting Caps, the other for dynamite, the latter only large enough to hold about one day's supply.

Owing to the precipitous character of the site and loose ground, the cost of excavation and retaining walls proved a heavy item of expense.

THE MILL

Tonnage Crushed

	1925	1924
Total wet tons received	117,991	84,078
Average percent moisture	10.3	10.0
Total dry tons milled	105,850	75,710
Average tons per day milled (365 days)	290	207
Average tons per day milled, full running time (305.476 days)	346	....
Average tons per day milled, full running time (270.91 days)	....	279
Average tons per day milled, per 1,850 lbs. stamp	17.3	13.9
Number of 1,850 lbs. stamps	20	20
Total tons treated by present mill to Dec. 31, 1925	1,368,708	....

Recovery

	1925	1924
Average ounces silver received per ton	25.075	31.855
Total ounces silver received	2,654,230	2,411,742
Average ounces silver recovered per ton	23.052	28.886
Total ounces silver recovered	2,440,042	2,186,991
Average silver recovery, per cent	91.93	90.68

Average ounces gold received per ton	.0409	.0618
Total ounces gold received	4,334	4,678
Average ounces gold recovered per ton ...	.0384	.0585
Total ounces gold recovered	4,062	4,426
Average gold recovery, per cent.....	93.89	94.61

Supplies Used

	1925	1924	1925	1924
	Per Ton of Ore Crushed		Per Oz. Fine Bul'n Produced	
	Tonnage		Grade of Ore	
	105,850	75,710	Ag. 25.075 Au. .0409	Ag. 31.855 Au. .0618
Cyanide (100% KCN)	5.882 lbs.	7.584 lbs.	.254744 lbs.	.262008 lbs.
Zinc Dust	.991 "	1.3710 "	.042917 "	.047365 "
Muriatic Acid	.056 "	.0763 "	.0027572 "	.0022638 "
Lime 100%	15.930 "	16.2570 "	.6899010 "	.5616690 "
Borax	.048 "	.1012 "	.0020780 "	.0034950 "
Soda	.020 "	.0498 "	.0008776 "	.0017200 "
Fuel Oil	.062 gal.	.0911 gal.	.0026844 gal.	.0031490 gal.
Artificial Pebbles	62.834 lbs.	95.2318 lbs.	2.7212426 lbs.	3.2901090 lbs.
Foreign Pebbles	1.753 "	1.5138 "	.0759223 "	.0523000 "

ORE ANALYSIS

The following is a comparative analysis of the average ore treated. Attention is drawn to the marked increase in the percentage of Zinc, which is an element detrimental to extraction:

	1925	1924
Silica	72.98%	75.47%
Aluminum Oxide	3.72%	8.87%
Iron	3.12%	3.60%
Manganese	0.72%	1.00%
Calcium Oxide	0.60%	0.54%
Magnesium Oxide	1.37%	1.55%
Lead	0.19%	0.32%
Zinc	1.38%	0.35%
Antimony	trace	0.03%
Sulphur	1.33%	1.22%
Arsenic	trace	none

Recovery

A new record of Silver recovery was obtained in 1925, this being 91.93% or 1.25% higher than in 1924, when it was 90.68%. Most of the increase is ascribed to equipment additions during the year, consisting of One 4 x 10 Ball Mill, Two High Agitation Tanks, and One 500 cu. ft. Air Compressor. Based on a yearly Silver output equal to that of 1925, a 1.25% improvement in Silver recovery represents a yearly net saving of about $20,000.00, and indicates that these additions are a good investment and will pay for themselves in less than two years. With cleaner solutions

available when the Cyanide Recovery Process, now being installed, is in operation, there should be a tendency for further betterment in Silver Recovery.

The Gold recovery was 93.89%, or .72% less than in 1924. The quantity of Gold produced in proportion to the Silver, however, is so small that the difference can be laid to errors in assaying the very small quantities of Gold present in daily samples.

Recovery Detail

	1925				1924			
	Hrs.	Min.	Ag.%	Au.%	Hrs.	Min.	Ag.%	Au.%
Extraction by Crushing Solution	9	00	36.22	78.19	9	00	37.70	75.73
Extraction by Agitation.	75	08	55.64	14.72	78	45	52.70	18.77
Extraction by Slime Presses	1	05	.69	1.71	1	15	1.09	.81
	85	13	92.55	94.62	89	00	91.94	95.31
Less Dissolved Value Loss			.62	.73			.81	.60
Recovery			91.93	92.89			90.68	94.71

Metallurgical Improvements

Further investigation of the Cyanide Recovery Process resulted in purchase of the Process rights and the equipment and commencement of its installation in December. The anticipated benefits are threefold; (a) recovery of cyanide now going to waste with the tailings; (b) cleaner solutions, therefore tendency towards better silver recovery, and, (c) elimination of claims for poisoned stock on the part of ranchers located along the tailings ditch.

A large Classifier was purchased and will be installed shortly. It is not an addition but replacement of two similar machines which are obsolete and of insufficient capacity.

In 1926 further investigation will be made of Electrolytic Precipitation. Experiments have already been made here along this line but were stopped owing to unfavorable conditions during the war.

Refinery

The average cost of producing a bar of Doré Bullion from cyanide precipitates was $8.39, as compared with $9.65 in 1924.

In former years the product was shipped entirely in the form of precipitates and in the past year a trial shipment was made to determine if it would not be more economical to revert to this practice. The results show that at the present time it is cheaper to continue shipping the product in the form of bars.

The equipment used in crushing and concentrating the slag was removed from the Refinery Annex and installed inside the Refinery. This change affords greater security, cheaper and more convenient operation, and releases the Refinery Annex Building for other purposes.

POWER

Rainfall

	1925	1924	1923
Total Rain, Inches	55.61	66.47	47.12
Number Rainy Days	200	203	164
Greatest Monthly Rainfall	11.15 Sept.	13.79 Oct.	13.24 June
Lowest Monthly Rainfall	0.30 Feb.	0.19 Mar.	0.19 Feb.
Greatest Single Rainfall	2.46 June	3.53 Oct.	2.09 June

HYDRO-ELECTRIC PLANTS

San Juancito Plant

Static Head .....1,357 feet.
Pipe Line .....4,739 feet of 20", 17" and 14" pipe.
Equipment .....2—350 KVA, 6,600 volts, 60 cycles, A. C. Generators, each coupled directly to 600 H. P. Pelton Wheel.
Flume Lines .....The Escobales and Aguacatal; built of wood, total length, 17,000 feet.

Guadalupe Plant

Static Head .....502 feet.
Pipe Line .....2,350 feet of 20" pipe.
Equipment .....2—350 KVA, 6,600 volts, 60 cycles, A. C. Generators, each directly connected to a 450 H. P. Pelton Wheel.
Flume Lines .....The Guadalupe, 6,000 feet in length, of wood.

POWER DISTRIBUTION

	1925		1924	
	Kilowatt Hours	K.W.Hours Per Ton	Kilowatt Hours	K. W.Hours Per Ton
Mine Power	2,004,810	18.940	1,560,640	20.613
Electric Haulage	337,550	3.188	228,763	3.022
Mine Lights	18,000	.170	15,396	.203
Mill Power	3,716,990	35.116	3,008,404	39.736
Mill Lights	24,000	.227	26,806	.354
Surface Lights	24,000	.226	25,422	.336
Surface Power	120,000	1.134	116,854	1.543
Machine Shop	24,000	.227	25,622	.338
Laboratory	6,000	.057	7,693	.102
Totals	6,275,350	59.285	5,015,600	66.247
Power Production By				
San Juancito Plant	54.1%		53.2%	
Guadalupe Plant	45.9%		46.8%	

COST OF POWER PRODUCTION

	1925			1924		
	Amount	Per Ton	Per K.W.Hr.	Amount	Per Ton	Per K.W.Hr.
Labor	$16,342.67	.15439	.002604	$13,950.52	.18	.00278
Supplies	5,867.11	.05543	.000935	4,837.96	.06	.00096
Total	$22,209.78	.20982	.003539	$18,788.48	.24	.00374

Based on Horsepower Generated

	1925	1924
Horsepower Hours	8,411,997	6,723,324
Cost per Horsepower Hour	$ 0.00264	$ 0.00279
Cost per Horsepower Year	$ 23.12640	$ 24.44040
Cost per Horsepower Year, Decrease.	$ 1.31400	

Notwithstanding 10.86 inches less rain in 1925 than in 1924, 1,259,750 K.W. Hours more were produced. This increase is due almost entirely to the New San Juancito Power Plant Reservoir which has been in service about 18 months. Its benefits have been so evident it can safely be said they have already covered cost of construction, which was $38,816.34.

In the past two and a half years additional installations have increased power demands to the following extent:

1 Air Compressor (Mine)	175 H.P.
1 Air Compressor (Mill)	45 "
1 Ball Mill (Mill)	55 "
1 Electric Welding Set	50 "
1 Electric Hotel Range	20 "
Electric Water Heaters, Stoves, etc.	20 "
Total	365 H.P.

In 1926 there will be a further demand of about 45 H.P. for the Cyanide Recovery Process, making in all about 410 H.P. more than was the case two and a half years ago. On the other hand, the capacity of the two power plants has not been increased, resulting that at peak load periods these lack about 250 H.P. of taking care of the full load. To make up this deficiency it is proposed to replace the present water wheels in each plant by larger and more efficient ones and the capacity of the electric generators is to be increased correspondingly in improving the power factor by installing Static Condensers. Besides serving this purpose, the Static Condensers will also increase the capacity of transmission lines, transformers and motors. As the large induction motors are old, those operating the two large Air Compressors being greatly overloaded, their life should be increased by improvement in power factor. Most of the remodeling equipment referred to has been ordered and will be installed in 1926.

Electrical Equipment

Besides the four generators and exciters in the two power plants and two traction motor generator sets for the six locomotives, there are 65 motors on the property, ranging from ½ H.P. to 430 H.P. capacity. With but few exceptions the large units have seen more than 14 years continuous service, mostly under severe conditions. But every effort is being made to keep all this equipment in the best shape with the result that no costly replacements are contemplated for a number of years to come.

Flume Lines

No new Flume Lines were built in 1925. The Aguacatal Flume, of wood, has been in service more than 15 years and while kept in good repair, the cost of this may soon reach a figure making it advisable to install a new flume.

There appears to be sufficient excess water at the Lower 650 level above milling requirements during the dry season of the year, when there is power shortage, to warrant installing a small flume about 3900 feet in length to convey this excess water from the Lower 650 level to the Aguacatal Flume Dam and thus generate additional power through the San Juancito Plant. It is expected that this Flume will be built in 1926.

MECHANICAL DEPARTMENT

New Machine Shop

The Machine Shop equipment was moved into the new building in August. The construction involved considerable expense but was one more of necessity than choice, as the old shop building, built on stilts on a steep hillside, was shifting down hill. In the new shop, all tools, such as lathes, etc., are mounted on concrete instead of constantly shifting board flooring. This assures their better alignment, therefore better work.

Foundry

The Foundry, located in the Machine Shop building, started work in November. After local labor is trained to foundry work, there is every reason to believe considerable economy will result in casting such articles as car wheels, tube mill liners, battery shoes and many other articles. One ton of coke should produce about seven tons of castings, therefore, in the freight item alone on imported castings, and which is about $60.00 per ton, an important saving should result. It is estimated that there is enough scrap iron and other material on the property to keep the foundry in operation several years.

OTHER DEPARTMENTS

Medical Department

	1925	1924
Number of treatments, foreigners	178	255
Number of treatments, natives	3,656	3,556
Total number of treatments	3,834	3,811
Cost of maintenance	$ 7,180.76	$ 5,565.33

The same policy, namely, that of rendering free medical and hospital service to all employees, was adhered to in 1925.

Assay Office and Laboratory

	1925	1924
Total number of assays run	21,274	17,372
Average number of assays per day	58	47
Total cost	$ 6,341.92	$ 6,675.36
Cost per assay	$ .30	.38

Hotel

	1925	1924
Total number of meals served	33,167	31,851
Total cost	$18,231.46	$17,728.13
Cost per meal	$ .550	$ .556

Roads

	1925	1924
Total maintenance	$ 3,411.62	$ 4,290.01
Decrease	$ 878.39	.....

Schools

Average daily attendance during year:	1925	1924
Boys' School	86	73
Girls' School	89	108
Total expense	$ 7,056.61	$ 6,971.54

Police and Garrison

	1925	1924
Total maintenance expense	$ 8,772.34	$10,025.62
Decrease	$ 1,253.28	.....

Agencies

	1925	1924
Total expense	$ 3,623.12	$ 5,742.48
Decrease	$ 2,119.36	.....

EXPANSION

Aurora—Santa Elena
Department of Tegucigalpa,
Extent 900 Hectares, held under permanent title.

This property joins that of Rosario on the latter's southern boundary.

On the Aurora zone, the section where last year's work was done, the geology consists of tilted and contorted shales capped by rhyolitic rock. Erosion and other action has exposed numerous thin ore bearing stringers existing in the shale and also the existence of a shale-rhyolite contact. In 1925 tunnels were driven on two stringers having a strike towards the contact in the expectation that if entering the rhyolitic rock, they would widen to workable width and be more constant in value content. Driving was also done on the Shale-Rhyolite contact to locate any stringers or veins extending to or crossing it. None of this work has as yet reached its objective. About 200 tons of ore has been found which can be assorted to a grade warranting shipment to Rosario for treatment. Up to the present time 8.96 tons, yielding 321.32 ozs. Silver, 3.80 ozs. Gold have been received.

On the Santa Elena zone the work consisted in driving a Cross-cut to locate the Santa Elena vein about 100 ft. below the deepest workings. The vein, about 2 ft. in width, produced some ore in the past and there is a possibility that it may also be ore bearing at the new Cross-cut level. It should be intersected by the Cross-cut some time in 1926.

Both zones abound in stringers and narrow veins and while surface prospecting has been done on the most promising ones their showing does not warrant further work at present.

A boundary line and topographical survey is being made and is to be tied in with that of Rosario.

The total amount of underground driving in 1925 on the whole property was 1120 ft. Expenditures over the same period were $15,939.28.

Moloncosa
El Corpus, Department of Choluteca,
Extent, 17 Hectares, held under permanent title.

The 128.5 ft. of underground driving done in 1925 showed that further work on this property is not warranted at the present time. There is a high Grade Gold streak visible in the first drift just off the Adit Cross-cut on level No. 1. While of no commercial importance, if worked on Company account, efforts will be made to interest some prospector to mine it on a royalty basis.

Expenditures in 1925 amounted to $1,385.90.

San Buena Ventura
El Corpus, Department of Choluteca,
Extent, 30 Hectares, held under permanent title.

Exploratory work during the year consisted of 1219.5 ft. and was done at a depth of about 160 ft. below the surface on three

veins varying from 1 ft. to 8 ft. in width. It showed that the bunches of rich ore in portions of the surface outcrops do not extend downward. Accordingly all work was stopped and arrangements made to mine the surface ore, for treatment at Rosario, on a royalty basis. Up to the present time 0.86 tons, yielding 120.63 ozs. Silver and 2.97 ozs. Gold, have been received.

Expenditures in 1925 amounted to $7,279.87.

Moramulca
San Isidro, Department of Choluteca,
Extent, 1100 *Hectares, held under permanent title.*

In 1925, 1359 ft. of tunneling was done on four Gold bearing quartz veins ranging from three feet to forty feet in width, to learn if improvement in their value content would occur at depth. Before this object could be attained it was necessary to suspend operations owing to lack of efficient supervision and labor. The climate of the region is a trying one and has been the principal cause of the difficulty.

The width of the veins, their apparent freedom from elements involving costly metallurgical treatment, the convenient location of the property with respect to cheap transportation and the proximity of water power, represents a combination which would permit profitable exploitation of very low grade ore.

Work is to be resumed as soon as possible.

Expenditures in 1925 were $8,400.82.

CONCLUSION

A new Silver production record was made in 1925, and the condition of the property, both as regards ore resources and Plant, is such that a more or less equal production can be looked for in 1926.

Exploration for new veins has had first attention and although since 1923 none as yet indicating large ore bodies have been found, considerable favorable ground in some of the principal producing veins still remains wherein a large percentage of ore to replace that being mined can be developed. This is particularly true of veins in the Esperanza section of the Mine, where development still has to be done below the Upper 150 level.

A new record was made in Silver recovery and it is believed that despite the tendency of the ore to become harder to treat, last year's recovery figure will be more or less maintained in 1926.

The policy of keeping the property at the highest point of operating efficiency in all departments, by adopting, after full investigation, any device or process lowering operating costs was continued in the past year. In conformity with this, the Cyanide Recovery Process, which should effect important reduction in Cyanide consumption and other economies, has been adopted and all arrangements made for its installation early in 1926.

The question of sufficient power plant capacity to take care of all present power needs in the rainy season is a very vital one and has been gone into thoroughly. The requisite machinery to remodel both plants has been ordered and when installed should not only take care of all present power needs, but also of moderate additional power demands in the future.

It is again a pleasure to be able to thank you, the Officers, and the members of the Board of Directors for the continuance of full confidence and support and to state that if any credit is to be given for what has been accomplished in 1925, the much larger part must go to the Staff for its faithful and efficient service at all times.

Very truly yours,

A. R. GORDON, *General Manager.*

Annex "A"

Summary of Calculated Ore Reserves

(At 13 cu. ft. per ton)

Veins	Av. Width Feet	Per Cent Waste	Tons of Ore & Waste	Ozs. Ag. per Ton	Ozs. Au. per Ton	Total Ozs. Ag.	Total Ozs. Au.
Carmen	1.8	50	14,500	30	.04	435,000	580
Culebra	1.6	35	20,000	16	.05	320,000	1,000
Fortuna	1.3	40	16,000	22	.03	352,000	480
Independencia	2.1	45	34,000	36	.08	1,224,000	2,720
Salvador	2.3	40	80,000	26	.03	2,080,000	2,400
Santa Gertrudis	1.0	73	11,500	22	.03	253,000	345
San Joaquín	1.0	60	9,500	15	.12	142,500	1,140
North San Miguel	1.6	35	4,800	15	.06	72,000	288
So. San Miguel Group	1.4	50	30,000	17	.06	510,000	1,800
Southwest	1.5	40	8,000	18	.04	144,000	320
Totals			228,300	24.23	.0485	5,532,500	11,073

Summary of Estimated Ore Reserves

(At 13 cu. ft. per ton)

Buena Ventura	3,000	12	.06	36,000	180
Candelaria Group	5,000	12	.06	60,000	300
Capitana	3,000	10	.13	30,000	390
Catalina	3,000	14	.05	42,000	150
Colonia	4,000	14	.07	56,000	280
Esperanza	1,500	15	.05	22,500	75
Guadalupe	1,000	12	.03	12,000	30
Jucuara	2,000	12	.05	24,000	100
North	2,000	14	.05	28,000	100
Northwest	4,000	14	.05	56,000	200
Nueva	1,500	12	.05	18,000	75
Porvenir	2,000	13	.05	26,000	100
Rosario	7,000	12	.06	84,000	420
Socorro	1,000	14	.05	14,000	50
West	2,000	13	.03	26,000	60
Termopilas	2,000	16	.09	32,000	180
Total	44,000	12.875	.06114	566,500	2,690

Summary of Estimated Stope Filling

(At 17 cu. ft. per ton)

Candelaria	3,000	10	.04	30,000	120
Guadalupe	2,000	10	.03	20,000	60
Rosario	2,500	10	.04	25,000	100
West	1,500	10	.03	15,000	45
Buena Ventura	1,000	10	.03	10,000	30
Totals	10,000	10	.0355	100,000	355

Summary of Broken Ore in Stopes

(At 21 cu. ft. per ton)

Total	16,046	22.72	.0429	364,565	688

Total Summary

Calculated Ore	228,300	24.23	.0485	5,532,500	11,073
Estimated Ore	44,000	12.88	.0611	566,500	2,690
Estimated Stope Filling	10,000	10.00	.0355	100,000	355
Broken Ore in Stopes	16,046	22.72	.0429	364,565	688
Totals	298,346	21.999	.0496	6,563,565	14,806

298,346 tons of ore averaging at Mill:

Silver .... 21.999 Ozs.
Gold ..... .04963 Ozs.

Annex "B"
BROKEN ORE IN STOPES
(At 21 cu. ft. per ton)
Total by Veins

VEINS	Tons
Buena Ventura	250
Candelaria Group	1,260
Catalina	180
Colonia	300
Culebra	1,500
Fortuna	682
Independencia	38
Northwest	400
Rosario	1,904
Salvador	9,054
Santa Gertrudis	103
South San Miguel Stringer	75
Chute No. 36	150
Chute No. 51	150
Total	16,046

Estimated Average Value per Ton: Ozs. Silver 22.72
Estimated Average Value per Ton: Ozs. Gold ..... .0429

Annex "C"
Exploration and Development for the Year 1925

Location	Drifts	Crosscuts	Raises	Winzes	Total Feet
Buena Ventura	43.0	....	73.0	....	116.0
Candelaria	251.0	78.0	107.5	....	436.5
Carmen	333.5	....	28.0	....	361.5
Colonia	....	....	80.5	....	80.5
Culebra	1,165.0	164.0	387.0	....	1,716.0
Esperanza Crosscut Hdg. (U-150)	....	462.0	....	....	462.0
Esperanza Crosscut Hdg. (L-650)	....	1,532.0	....	....	1,532.0
Esperanza Crosscut Str. (Sta. 46)	37.0	....	....	....	37.0
Esperanza Crosscut Str. (Sta. 63)	105.5	....	....	....	105.5
Esperanza Crosscut Str. (Sta. 26)	43.0	....	....	....	43.0
Esperanza Crosscut Str. (Sta. 88)	110.5	....	....	....	110.5
Fortuna	290.0	56.0	73.5	9.0	428.5
Independencia	2,248.5	258.0	1,586.0	....	4,092.5
North	49.0	....	....	....	49.0
Northwest	125.5	....	....	....	125.5
Rosario	523.5	82.0	269.0	....	874.5
Salvador	1,965.5	366.5	378.5	23.5	2,734.0
Santa Gertrudis	466.0	....	127.0	....	593.0
South San Miguel	36.0	27.0	83.0	....	146.0
San Vicente	349.0	....	....	....	349.0
Southwest	15.0	....	....	....	15.0
Termopolis	66.0	....	80.0	....	146.0
Totals	8,222.5	3,025.5	3,273.0	32.5	14,553.5
CONNECTIONS					
West Vein Cut-off	....	378.5	....	....	378.5
GRAND TOTAL					14,932.0

Annex "D"
ORE PRODUCTION 1925
(Dry Tons)

From Stoping Operations	Jan.	Febr.	March	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Buena Ventura	....	17	....	....	....	....	....	....	41	75	127	104	364
Candelaria Group	320	177	432	223	....	....	....	....	....	....	....	....	1,152
Carmen	....	42	81	45	86	70	....	140	120	318	469	350	1,721
Catalina	15	49	123	45	96	101	112	122	89	218	153	417	1,540
Culebra	265	549	370	227	561	786	971	1,099	1,101	1,144	1,410	600	9,083
Fortuna	445	267	430	373	485	410	274	281	302	122	373	595	4,357
Independencia	1,103	664	749	778	647	507	327	566	258	9	....	30	5,638
Northwest	140	175	305	190	318	457	530	629	283	403	360	443	4,233
Rosario	47	95	286	424	286	464	768	606	788	674	578	471	5,487
Salvador	2,158	2,244	2,316	2,398	2,509	2,669	3,300	3,089	3,237	4,530	5,357	5,303	39,110
Santa Gertrudis	68	179	194	191	185	415	557	369	518	360	670	768	4,474
South San Miguel	485	589	606	375	539	492	546	721	1,053	554	670	610	7,240
Southwest	131	208	349	266	216	61	19	....	....	....	....	....	1,250
Termopolis	....	....	69	78	....	....	....	....	....	....	30	50	227
Totals	5,177	5,255	6,310	5,613	5,928	6,432	7,404	7,622	7,790	8,407	10,197	9,741	85,876
From Development Excavations—													
Buena Ventura	....	....	....	....	....	....	....	....	17	16	....	108	141
Carmen	....	....	46	6	67	53	67	86	160	120	181	152	938
Colonia	....	....	....	....	....	....	....	....	....	....	....	33	33
Culebra	54	175	190	117	170	355	332	296	459	402	290	193	3,033
Fortuna	95	28	23	21	88	81	....	9	....	....	30	....	375
Independencia	970	733	827	549	602	995	703	643	631	425	542	316	7,936
North	4	11	6	....	....	....	....	....	....	....	....	....	21
Northwest	....	....	26	3	....	....	72	57	....	....	....	....	158
Porvenir	27	53	6	....	....	....	....	....	....	....	....	....	86
Rosario	....	....	....	....	....	....	121	151	11	28	143	140	594
Salvador	435	312	394	305	376	72	219	240	445	300	251	435	3,784
Santa Gertrudis	36	21	62	14	145	96	93	161	194	156	258	251	1,487
Miscellaneous	....	....	....	....	94	52	75	92	124	72	54	215	778
Totals	1,621	1,333	1,580	1,015	1,542	1,704	1,682	1,735	2,041	1,519	1,749	1,843	19,364
From Stope Fills	....	130	146	175	84	9	64	4	12	....	....	....	624
GRAND TOTAL	6,798	6,718	8,036	6,803	7,554	8,145	9,150	9,361	9,843	9,926	11,946	11,584	105,864

Annex "E"

Tonnage Mined from October 1, 1907 to January 1, 1926

VEINS	Total including Stoping, Devel. & Filling Oct. 1/07 to Dec. 31/24	Total including Stoping, Devel. & Filling Year 1925	Grand Total including Stoping, Devel. & Filling January 1, 1926
Buena Ventura	96,495	1,049	97,544
Candelaria Group	161,549	1,152	162,701
Capitana	52,945	.....	52,945
Carmen	13,749	2,659	16,408
Catalina	2,958	1,540	4,498
Colonia	51,936	33	51,969
Concepción	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	62,278	12,116	74,394
Esperanza	8,666	.....	8,666
Fortuna	9,341	4,732	14,073
Guadalupe	60,875	.....	60,875
Independencia	10,736	13,574	24,310
Jucuara	2,207	.....	2,207
North	4,530	21	4,551
Northwest	74,479	4,391	78,870
Nueva	27,846	.....	27,846
Porvenir	959	86	1,045
Rosario	137,329	6,081	143,410
Salvador	91,584	42,894	134,478
Santa Gertrudis	3,280	5,961	9,241
San Joaquín	63,030	.....	63,030
San Miguel (stringer)	2,625	.....	2,625
San Miguel North	174,801	.....	174,801
San Miguel South	88,974	7,240	96,214
Socorro	19,810	.....	19,810
Southwest	19,121	1,330	20,451
Termopolis	441	227	668
West	96,533	.....	96,533
Ore from Development	63,599	.....	63,599
Miscellaneous	757	778	1,535
Totals	1,430,013	105,864	1,535,877

Summary

October, 1907, to January 1, 1926

From Stoping	1,200,116
From Development	103,687
From Fills	232,074
Total	1,535,877

Condensed Balance Sheet

New York & Honduras Rosario Mining Company

New York City

December 31st, 1925

ASSETS

Permanent—		
Mine, Real Estate and Concessions	$3,000,000.00	
Plant, Buildings, Machinery and Equipment $1,395,587.96		
Less: Allowance for Depreciation. 865,130.72		
	530,457.24	
		$3,530,457.24
Current:		
Cash	84,457.50	
Loans Receivable plus Interest (Secured)	100,292.64	
Bullion at Smelters and in Transit at Market— Less: Allowance for Expense	263,333.94	
Broken Ore in Stopes and Mill Bins at Cost	77,385.70	
Materials and Supplies at Cost	247,461.54	
U. S. Securities at Market plus Interest	472,356.28	
Marketable Securities at Market plus Interest	1,346,336.29	
		2,591,623.89
Other Assets—		
Loan to Government of Honduras—Balance	6,987.67	
Sundry Accounts Receivable	4,883.11	
Capital Stock of Other Companies and Advances (Nominal Value)	1.00	
		11,871.78
Deferred Charges—		
Prepaid Insurance, Taxes and Expenses		127,404.37
TOTAL ASSETS		$6,261,357.28

LIABILITIES

Current:		
Drafts Payable	$76,882.01	
Accounts Payable	26,856.22	
Federal Income and Profits Taxes, prior years— Estimated	123,301.99	
Federal Income Tax—1925	50,998.41	
		$ 278,038.63
Reserves—		
Depletion of Mine	1,811,703.67	
Mine Fire Insurance	49,967.82	
Transit Insurance	14,090.91	
Dividends—Payable January, 1926	100,000.00	
		1,975,762.40

Capital Stock—			
Authorized and Issued—200,000 Shares of a Par Value of $10.00 per Share		2,000,000.00	
Surplus—			
Earned Surplus	$1,262,125.22		
Appreciatoin of Mine Valuation—			
Less: Depletion	745,431.03		
		2,007,556.25	
			4,007,556.25
			$6,261,357.28

Income and Profit and Loss Statement

New York & Honduras Rosario Mining Company

New York City—For the year ended December 31, 1925

Production of Gold and Silver	$1,763,023.16		
Less: Freight and Expense on Bullion	65,175.45		
Operating Income			$1,697,847.71
Deduct: Operating Expense			894,830.04
Operating Profit			$ 803,017.67
Deduct: New York Administrative Expense			62,288.60
Net Profit from Operations			$ 740,729.07
Other Income			90,682.70
			$831,411.77
Other Deductions from Income			67,226.70
Net Profit Before Federal Income Tax and Provision for Reserves			$ 764,185.07
Federal Income Tax			50,998.41
Net Profit for Year			$ 713,186.66
Appropriated for Reserves—			
Ore Depletion	$ 223,189.29		
Mine Fire Insurance	6,076.74		
Transit Insurance	3,211.21		
			232,477.24
Profit for Year Carried to Surplus			$ 480,709.42
Surplus—			
Surplus, January 1, 1925	$1,943,901.24		
Additions—			
Increase in Market Value of Securities owned at Dec. 31, 1925	$ 34,798.59		

Deductions—			
Dividends Paid and Provided for	$400,000.00		
Capital Stock Other Companies Written Off	51,853.00		
	$451,853.00	$417,054.41	$1,526,846.83
Surplus—December 31, 1925			$2,007,556.25

Auditor's Certificate

WE HEREBY CERTIFY that we examined the books of account and record of the NEW YORK & HODURAS ROSARIO MINING COMPANY, NEW YORK CITY, for the year ended December 31, 1925, and, subject to the fact that we did not examine the records of the Mine Office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at December 31, 1925, and that the related Income and Profit and Loss Statement is correct.

(Signed) ERNST & ERNST.

(Seal)

New York & Honduras Rosario Mining Company

Comparative Statement of Net Assets

FOR THE YEARS ENDED DECEMBER 31st AS BELOW

	1918	1919	1920	1921	1922	1923	1924	1925
CURRENT ASSETS—								
Cash and Cash Items	$361,399	$172,165	$470,377	$283,570	$308,423	$474,620	$146,298	$184,750
Marketable Securities	323,500	208,800	179,822	408,485	564,611	546,239	1,394,411	1,818,692
Bullion in Transit	387,348	805,137	231,770	1,145	142,270	307,157	261,416	263,334
Ore in Stopes and Mill Bin	112,126	95,134	120,978	114,217	91,467	88,245	107,375	77,385
Materials and Supplies	401,343	329,101	403,393	308,464	191,772	210,782	235,033	247,461
Total Current Assets	$1,585,716	$1,610,337	$1,406,340	$1,115,881	$1,298,543	$1,627,043	$2,144,533	$2,591,622
Deduct: Current Liabilities	694,372	522,062	199,069	218,387	218,305	205,153	262,560	278,038
Net Current Assets	$891,344	$1,088,275	$1,207,271	$897,494	$1,080,238	$1,421,890	$1,881,973	$2,313,584
OTHER ASSETS—								
Accounts Receivable, Investments, Deferred Charges, etc.	237,026	368,378	144,173	178,546	269,179	312,547	222,260	139,276
PERMANENT—								
‡Mines, Real Estate, Concessions, Buildings, Machinery, etc. (less Allowances for Depreciation)	2,213,070	2,188,829	2,134,275	2,116,892	2,080,317	2,030,539	2,032,953	2,030,457
*Total Net Assets	$3,341,440	$3,645,482	$3,485,719	$3,192,932	$3,429,734	$3,764,976	$4,137,186	$4,483,317
Increase of Net Current Assets over Preceding Year		$196,931	$118,996	†$309,777	$182,744	$341,652	$460,083	$431,611
Increase of Net Current Assets over December 31, 1918		$196,931	$315,927	$6,150	$188,894	$530,546	$990,629	$1,422,240

*Represented by Capital Stock, Surplus, Reserves for Depletion, Exchange Fluctuation, Contingencies, etc., with no adjustment for increased valuation of mines, etc.

† Decrease.

‡ Not adjusted for increased valuation of mines.

Table Showing

Bullion Production		Distribution to Stockholders		
1882	$2,452.27	1887 No. 1	$37,500— 2½%	Dividend
1883	12,900.42	1888 Nos. 2 to 5	60,000— 4%	Dividend
1884	149,741.39	1889 Nos. 6 to 14	150,000—10%	Dividend
1885	244,444.70			
1886	224,157.58	1891 Nos. 15 to 16	30,000— 2%	Dividend
1887	613,446.05	1892 Nos. 17 to 21	165,000—11%	Dividend
1888	767,632.15	1893 Nos. 22 to 25	150,000—10%	Dividend
1889	590,189.55	1894 No. 26	37,500— 2½%	Dividend
1890	113.28			
1891	369,587.19	1896 Nos. 27 to 28	30,000— 2%	Dividend
1892	614,498.67	1897 Nos. 29 to 40	180,000—12%	Dividend
1893	492,534.87	1898 Nos. 41 to 48	120,000— 8%	Dividend
1894	392,485 92	1899 Nos. 49 to 60	180,000—12%	Dividend
1895	158,164.42	1900 Nos. 61 to 75	225,000—15%	Dividend
1896	449,525.88	1901 Nos. 76 to 93	300,000—20%	Dividend
1897	568,872.06	1902 Nos. 94 to 100	105,000— 7%	Dividend
1898	611,467.76	1903 No. 101	15,000— 1%	Dividend
1899	798,994.77	1904 Nos. 102 to 108	105,000— 7%	Dividend
1900	827,443.12	1905 Nos. 109 to 121	180,000—12%	Dividend
1901	780,760.18	1906 Nos. 122 to 139	285,000—19%	Dividend
1902	490,273.34	1907 Nos. 140 to 153	210,000—14%	Dividend
1903	436,818.29	1908 Nos. 154 to 165	180,000—12%	Dividend
1904	721,374.87	1909 Nos. 166 to 173	120,000— 8%	Dividend
1905	993,065.39	1910 Nos. 174 to 180	105,000— 7%	Dividend
1906	1,112,171.69	1911 Nos. 181 to 182	90,000— 6%	Dividend
1907	791,347.62	1912 Nos. 183 to 184	70,000— 3½%	Dividend
1908	788,910.23			
1909—10 months	636,500.00	1913 Nos. 185 to 188	180,000— 9%	Dividend
1910	890,700.00	1914 Nos. 189 to 193	240,000—12%	Dividend
1911	887,169.59	1915 Nos. 194 to 197	240,000—12%	Dividend
1912	944,212.67	1916 Nos. 198 to 205	400,000—20%	Dividend
1912-13—12 months	1,051,273.28			
1913—last 3 months	328,100.05	1917 Nos. 206 to 211	300,000—15%	Dividend
1914	1,239,877.13	1917 No. 1	100,000— 5%	Amortization
1915	1,191,760.70	1918 Nos. 212 to 215	200,000—10%	Dividend
1916	1,553,114.86	1918 Nos. 2 to 5	200,000—10%	Amortization
1917	1,674,193.80	1919 Nos. 216 to 219	200,000—10%	Dividend
1918	1,803,751.79	1919 Nos. 6 to 9	200,000—10%	Amortization
1919	2,115,158.25	1920 Nos. 220 to 225	320,000—16%	Dividend
1920	1,568,612.32	1920 Nos. 10 to 11	80,000— 4%	Amortization
1921	466,956.02	1921 No. 226	60,000— 3%	Dividend
1922	1,066,732.57	1922 Nos. 227 to 229	150,000— 7½%	Dividend
1923	1,421,911.15	1923 Nos. 230 to 234	250,000—12½%	Dividend
1924	1,584,610.32	1924 Nos. 235 to 240	350,000—17½%	Dividend
1925	1,763,023.16	1925 Nos. 241 to 247	350,000—17½%	Dividend
	$36,191,031.32	Total	$6,950,000	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00

Dividends 183 to 247, inclusive, were paid on Capital Stock of 2,000,000.00

Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00

REPORT of the
NEW YORK & HONDURAS
ROSARIO MINING CO.

1926

NEW YORK

January 1, 1927

OFFICERS 1927-1928

LEWIS L. CLARKE, *President.*

H. A. GUESS, *Vice-President.*

A. R. GORDON, *Vice-President.*

W. C. LANGLEY, *Treasurer.*

J. PERLMAN, *Secretary.*

BOARD OF DIRECTORS 1927-1928

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY, W. C. LANGLEY,
LEWIS L. CLARKE, W. L. SAUNDERS,
H. A. GUESS, E. V. SOTO,
IRVING HEIDELL, AMBROSE G. TODD,
DR. J. RALPH JACOBY, DR. JULIUS J. VALENTINE,
P. R. WEILER.

EXECUTIVE COMMITEE 1927-1928

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY, W. L. SAUNDERS
H. A. GUESS, AMBROSE G. TODD,
P. R. WIELER.

LEWIS L. CLARKE } *Ex-Officio*
W. C. LANGLEY }

Annual Report of the President of the New York and Honduras Rosario Mining Company For the year ended December 31st, 1926

Submitted at the
Annual Meeting of the Stockholders
April 6, 1927

New York, April 6, 1927.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

In my last annual report I stated that the year 1925 had been one of continued progress in efficiency and production. It is gratifying to be able to say that this is equally true of the year 1926. We have been favored with an increased production in silver and gold, as shown by the following figures:

1925	2,431,926.17	ounces silver
1926	2,474,472.12	" "

and 5,561 ounces gold as compared with 3,995 ounces gold in the preceding year.

This report, when mailed to you shortly after today's meeting, will be accompanied by the report of the General Manager for the year 1926, which will furnish to you a most complete description of the nature of our operations and the state of the property. It is, therefore, unnecessary for me to discuss these questions, except to remark upon the excellent showing which he gives in detail regarding the Company's ore reserves. These reserves indicate an increase over January 1st, 1926, of 696,435 ounces silver and 2,025 ounces gold.

In surveying the results for 1926 we must seriously consider the decided recession in the selling value of silver, which took place last summer. The effect upon our business is best understood when I call to your minds the fact that in 1923 we realized from our silver sales an average price per ounce of $.65015; in 1924, $.6826; in 1925, $.6910; and last year, $.6021. That this fall could not fail to affect our profits is indubitable, but thanks to favorable conditions at our property in Honduras, to reduced costs of operation, and to the general administration of the business, I am justified in saying that the past year has been a most satisfactory one.

I will now give you the figures relating to the most important facts of the business.

	1926	1925
Dry tons treated	109,670	105,850
Ounces silver produced (Smelter's final returns)	2,474,472.127	2,431,926.17
Ounces gold produced (Smelter's final returns)	5,561.057	3,994.367
Dars Doré Bullion	1,506	1,498
Drums Precipitates	0	48
Average silver recovery at Mine (per cent)	91.70	91.93
Average gold recovery at Mine (per cent)	94.62	93.89
Average ounces silver recovered at Mine (per ton)	22.649	23.052
Average ounces gold recovered at Mine (per ton)	.0528	.0384
Value per ounce of silver sold	$ .6021	$ .6910
Value of silver recovered (per ton)	13.5541	15.8758
Cost of silver recovered (per ton)	7.9429	8.8779
Cost of silver recovered (per ounce)	.3528	.3864
Net profit on silver recovered (per ton)	5.6112	6.9979
Net profit on silver recovered (per ounce)	.2493	.3046

The Net Operating Income for the year was	$1,537,422.83
Less: Operating Expenses	851,938.08
Operating Profit	685,484.75
Less: New York Administrative Expenses	70,099.26
Net Income from Operations	615,385.49
Miscellaneous Income	128,721.07
	744,106.56
Less: Miscellaneous Expenses	77,760.80
Net Profit for Year	666,345.76
Less: Appropriated for Reserves	240,943.60
Net Profit before Taxes	425,402.16
Less: Federal Income Tax	49,692.74
Net Earnings for Year	$ 375,709.42

Dividends Paid

April, 1926	$ 100,000.00	
July, 1926	100,000.00	
October, 1926	100,000.00	
January, 1927	100,000.00	
		$ 400,000.00

Paid from Net Earnings 1926	$ 375,709.42	
Paid from Undistributed Earnings of Prior Years	24,290.58	
		400,000.00
Currents Assets December 31, 1926, were		$2,633,939.06
or an increase over the preceding year of		42,315.17

These are as follows:

Cash	$ 44,939.41	
Loans Receivable, plus Accrued Interest	50,060.03	
Bullion at Smelters and in Transit	242,857.24	
Broken Ore in Stopes and Mill Bin	77,665.01	
Materials and Supplies at Cost	286,312.22	
U. S. Securities at Market, plus Accrued Interest	483,839.29	
Marketable Securities, plus Accrued Interest	1,448,265.86	
		$2,633,939.06

The foregoing represents a value of $12.55 per share of stock, in Current Assets, after deducting Current Liabilities of $123,768.59.

There was appropriated for Reserves:

Mine Fire Insurance	$ 6,816.03
Transit Insurance	3,371.31
Ore Depletion	230,756.26
	$240,943.60

Current Liabilities at December 31, 1926 (including taxes) were	$ 123,768.59
or a decrease of	154,270.04
Ratio of Current Assets to Current Liabilities	21.28 to 1.

Expansion

We have made further investigations at five properties, (Aurora-Santa Elena, Moloncosa, Moramulca, San Buena Ventura, and El Cristo), at a total expense of $10,127.56. The cost of the work done on the Sabana Grande-Honduras Mining Company property was $34,004.03.

Government of Honduras

We extend our felicitations to the Government of Honduras, and our thanks for the courtesies that the Government has extended to us.

Audit

The books of the Company have been audited by Messrs. Ernst & Ernst, and their report has been filed with us.

Respectfully submitted,

LEWIS L. CLARKE,
President.

Annual Report of the General Manager

SAN JUANCITO, HONDURAS, C. A., JANUARY 1, 1927.

TO THE PRESIDENT:
NEW YORK & HONDURAS ROSARIO MINING COMPANY,

DEAR SIR:

The following is a report of operations on the Company's property in Honduras during the year 1926.

Production

	1926	1925
Dry tons treated	110,700.	105,850.
Averaging per ton—Troy ounces silver	24.70	25.075
Averaging per ton—Troy ounces gold	.0558	.0409
Total ounces silver produced	2,501,542	2,440,042
Total ounces gold produced	5,829	4,062
Ratio of silver to gold	440 : 1	601 : 1
Bars Doré Bullion	1,506	1,498
Bullion fineness, silver	975.54	960.75
Bullion fineness, gold	2.20	1.60

Of the above production, 18,441 ounces silver and 184.5 ounces gold came from 1,026.5 tons of the old San Juancito Mill tailings and 4.2 tons of ore received from Company owned prospects.

The production of 2,501,542 ounces silver in 1926 is the largest in any year of the Company's history, exceeding by 61,500 ounces that of 1925, the previous highest production.

The production of 5,829 ounces gold exceeds 1925 figures by 1,767 ounces, over 30%, and is the largest since 1920. The

increased gold output resulted largely from reworking gold bearing veins in the Old Mine in accordance with plans discussed in this and previous reports.

The prospects for 1927 indicate that a more or less equal production of silver and a larger one of gold should be obtained.

Honduras Operating Costs

Basis:	1926	1925
Dry tons milled	109,670	105,850
Troy ounces silver produced	2,483,101	2,440,042
Troy ounces gold produced	5,645	4,062
Total troy ounces bullion produced	2,488,746	2,444,104

	Total Costs		Per Ton		Per Troy Ounce Fine Bullion Produced	
	1926	1925	1926	1925	1926	1925
Mine						
Labor	$258,013.12	$235,423.55	$2.35	$2.22	$.1037	$.0965
Supplies	155,821.01	167,928.24	1.42	1.59	.0626	.0688
Power	6,698.39	8,410.08	.06	.08	.0026	.0034
Total	$420,532.52	$411,761.87	$3.83	$3.89	$.1689	$.1687
Mill						
Labor	$ 54,131.50	$ 53,439.31	$ .49	$ .51	$.0217	$.0219
Supplies	204,377.56	212,819.04	1.86	2.01	.0821	.0872
Power	11,117.83	13,162.03	.10	.12	.0045	.0054
Total	269,626.89	279,420.38	2.45	2.64	.1083	.1145
Honduras Administration	$117,889.29	$123,474.38	$1.07	$1.17	$.0474	$0506
Totals	$808,048.70	$814,656.63	$7.35	$7.70	$.3246	$.3338
Credit value of gold produced	$112,902.18	$ 81,250.66	$1.02	$ .77	$.0453	$.0333
Net cost of silver	$695,146.52	$733,405.97	$6.33	$6.93	$.2793	$.3005
Cost per troy ounce of silver produced	$.2793	$.3005				

The total expenditures in 1926 were $6,607.93 less than in the year previous notwithstanding the increase of 3,820 tons in the tonnage mined and milled, the increase of 1,334 tons in Broken-Ore-In-Stopes reserves, and the increase of 1,331.5 feet in exploration and development work. Increased gold output by $31,651.51 and a more favorable rate of exchange of more than 2 points, representing about $6,000,000, were important factors in reducing the cost per ton and per ounce Troy of bullion produced.

FINANCIAL

Exchange

	1926	1925
Drafts on Treasurer during the year	$ 547,538.57	$ 578,587.76
Yield in Pesos	1,152,986.38	1,205,474.32
Rate of Exchange, average for the year	210.576%	208.348%
Exchange Earnings on Basis of Prescribed Rate of Exchange of 200%	$28,954.62	$ 24,149.40
Lowest Rate of Exchange during the year	212.00%	(October)
Highest Rate of Exchange during year	217.00%	(December)
Rate of Exchange as of December 31st	217.00%	

THE MINE

Ore Reserves

The following is a summary of Annex "A" which shows the ore reserves of each vein:

Summary

	Tons of Ore and Waste	Ozs. Ag. Per Ton	Ozs. Au. Per Ton	Total Ozs. Ag.	Total Au. Ozs.
Calculated Ore, at 13 cu. ft.	262,800	22.81	.045	5,995,500	11,838
Estimated Ore, at 13 cu. ft.	49,000	14.83	.074	726,500	3,630
Estimated Stope filling, at 17 cu. ft.	10,000	10.00	.0355	100,000	355
Broken Ore in Stopes, at 21 cu. ft.	17,380	25.20	.058	438,000	1,008
Totals	339,180	21.40	.049	7,260,000	16,831

The ore reserves as of January 1, 1927 show an increase of 40,834 tons, 696,435 ounces silver and 2,025 ounces gold when compared with those of January 1, 1926, notwithstanding the fact that in 1926, 109,670 tons containing 2,710,069 ounces silver and 6,177 ounces gold were mined. The average content per ton of the reserves is but 0.44 ounces silver less than that of the reserves reported a year ago.

Detailed reference to reserves of each vein is made in the succeeding paragraphs.

ORE PRODUCTION

	1926	1925
By Stoping	96,820 tons	85,876 tons
From Development Excavation	12,413 tons	19,364 tons
Stope Filling	288 tons	624 tons
Total delivered to Mill	109,521 tons	105,864 tons
Number of Producing Veins	25	19

The production from each vein in 1926 is given in Annex "D" and since 1907 in Annex "E".

The supply of underground labor, when compared with previous years, was quite satisfactory. This permitted a greater amount of development and exploration work than in 1925 and stoping ground was prepared for mining quite appreciably in excess of current requirements, with the result that when periods of labor shortage did occur there was always a place ready for immediate ore production. It was also possible to revive work in some of the old veins and start work in new ones. The average vein width in most of these is appreciably narrower than the general average, resulting in lower tonnage output per man and accordingly higher cost per ton. But these places must all be mined sometime and the best time to do it is, as in the year past, when labor is available and the higher cost of mining can be offset by cheaper costs in the wider veins.

The following is a comparison of labor supply for the Mine Department including top men such as blacksmiths, tool sharpeners, compressor men, mechanics, warehousemen, etc.:

	1926	1925
Number of shifts worked	306	307
Average number of men per shift including top men	500	498

In the past year it was necessary to increase the number of men on haulage operations on the night shift and Sundays because, while no materially greater tonnage was handled, the ore sources were less conveniently located. The labor supply for pipe, track and car repair work was unsatisfactory, there was a shortage throughout the year, and the men available were mostly inexperienced.

The average vein width being considerably below minimum stoping width, with many sections in all the veins split into two or more stringers, a large quantity of waste rock is mined with the ore. Every effort is exerted to keep the percentage of this down and it is believed that in the last year less waste was mined than for some time. As the ore is drawn from the stopes the large boulders of waste rock are removed and this seems to be about the economic limit of such work under present conditions.

Exploration, Development and Mining

The following is a summary of Annex "C" which shows, in detail, distribution of the footage driven in each vein.

Summary

	Drifts	Winzes	Raises	Cross-cuts	Total Feet
1925	8,222.5	32.5	3,273.0	3,404.0	14,392.0
1926	7,719.5	42.5	3,278.5	5,223.0	16,263.5

The footage driven in 1926 exceeds that of the year previous by 1,331.5 feet and is the greatest since 1920.

Maps, in plan and longitudinal section, accompanying this report, show in full detail all work done to date in the various veins as well as vein width and assay results at five foot intervals wherever possible.

In the past year mining operations were carried on in 27 veins as compared with but 19 in the year previous. Work in the additional veins consisted largely of exploration and development, made possible by greater labor supply.

The following is a general description of the more important work done in the different veins:

Buena Ventura Vein

This vein was a small ore producer in 1926, 575 tons being obtained as compared with 1,049 tons in 1925. Development was 83 feet.

The Buena Ventura has been thoroughly explored and was a very large high grade ore producer in the past. Therefore, future development would consist mainly in opening up small ore pillars which are now profitable.

The extent of work in 1927 will depend largely on that in other veins in the same section of the Mine. The ore reserves are the same as reported for 1925.

Candelaria Group

The Candelaria and its branch veins carry a much higher percentage of gold than the veins supplying most of the ore today. In past years this group was the main source for ore tonnage as well as the very large quantity of gold produced. It is believed the old workings still contain fairly extensive pillars, now profitable, and in 1926 work was devoted mainly to recovering these old workings. Recovery work is slow as the ground is badly caved; nevertheless in the past year the Upper 250 and Upper 350 levels were reached and a good start made on actual recovery of the vein itself. It is quite likely that in 1927 this section will commence producing ore. A small amount of development was done at the Lower 100 and Lower 400 levels, but on the whole the possibility of finding ore here which it would pay to mine at the present time is small.

The territory between the Upper 500 level and the surface has never been explored, mainly because the vein in the vicinity of the Upper 500 splits into several stringers and there is a general decrease in value content. As it is believed, however, that conditions will improve above this level, work is being done to intersect the vein at the Upper 600 level through a raise in the Socorro vein and thence by a 300 foot cross-cut.

Development consisted of 507 feet and ore production was 1,322 tons. The ore reserves remain the same as those for the year previous.

Capitana Vein

Like the Candelaria, this vein carries a high percentage of gold and the 1,299 tons of ore mined in the past year were of material help in raising the total gold production for the year. This ore came from the old workings at the Upper 350 level which were recovered in 1925. No other work was done in this vein in the past year, but in 1927 it is proposed to resume recovery work so that other ore pillars at the Upper 350 and Upper 550 levels can be mined. The body of good grade gold ore exposed in the floor and 47 foot winze of the Lower 100 level is to be reached through the Lower 300 level where work has already been started.

In view of the information obtained by last year's operation the ore reserves are the same as those for the year previous.

Carmen Vein

Development consisted of 64.5 feet and ore production 1,118 tons, the latter all from above the Upper 350 level. The vein was intersected by the Lower 650 Esperanza Cross-cut in the latter part of the year. At this point it has 3 foot width but assays only about 3 ounces silver per ton. But at the Upper 150 level, 804 feet higher vertically, where it is next exposed, the vein is narrower and assay results are better. The ore at the Upper 150 level, however, commences to come in about 300 feet to the south; therefore it will be necessary to drive at least this distance at the Lower 650 to get under this ore before it definitely can be stated that the Carmen ore bodies existing at the Upper 150 level do not extend to the depth of the Lower 650.

A 9 inch branch stringer, existing on the upper levels, was also intersected at the Lower 650 level, and assay results show it carries around 9 ounces silver per ton. While of no commercial importance at present, driving on it to the south is well warranted.

From what is known of the Carmen vein at the Upper levels its exploration at the Lower 650 level should be done to the south, as it is in that section that the known ore bodies lie. This work, as well as that in the stringer, probably will not be started until driving of the Lower 650 Esperanza Cross-cut is concluded and connection made with the Upper 150 level.

Ore reserves, both as to tonnage and value, remain the same as those for the year previous.

Catalina Vein

In the past year 523 tons of ore were mined from an ore pillar in the old workings at the Upper 150 level. A manway was built between this level and the Upper 250 where a small body of ore is to be stoped. In the coming year, if possible, either the Upper 250 or Upper 350 heading is to be driven southward, as the chances of finding ore in this section of the vein are considered fair.

Colonia Vein

The past year's work consisted largely in preparing the lower workings for ore production and mining 367 tons of ore. The Lower 300 level was recovered, but before stoping a body of medium grade ore existing there can begin, it will be necessary to drive a short drift at the Lower 100 level to divert the water which is now flooding the lower workings.

It was impossible to develop laterally the ore found by the connecting raise between the Lower 650 and the Lower 300 levels. This ore is of about average milling grade and extends downward from the Lower 300 level for about 100 feet. It is probable that in the coming year its lateral extent will be determined and stoping started.

Culebra Vein

The two cross-cuts, of which mention was made in the 1925 report, reached their objective in the early part of the year, this being the intersection of a branch vein the existence of which was suspected for some time. As a result, at the Upper 500 level a body of milling grade ore, 3feet in width, and about 350 feet lateral extent was found. At the Upper 350 level the same branch vein was intersected, but lateral development so far shows that at this level, about 150 feet below the Upper 500, the vein is poorer, narrower and less constant. Nevertheless a substantial quantity of ore is expected from this section, as improvement should occur as stoping approaches the Upper 500 level.

The work outlined for 1927 consists in exploring further the possibilities of the branch vein and resumption of exploration southward along the Culebra vein strike at the Upper 250 and Upper 150 levels.

In 1926 development and exploration consisted of 939.5 feet and ore production was 10,029 tons, compared with 1,716 feet and 12,116 tons in 1925.

Based on what last year's work has disclosed, ore reserves have been increased from 20,000 tons averaging 16 ounces silver and .05 ounce gold, to 28,000 tons of the same value notwithstanding an ore output of 10,029 tons in 1926.

Esperanza Vein

This vein was intersected by the Upper 150 Esperanza Crosscut in 1913 and produced a small quantity of ore.

In the last year a 65 foot drift was driven to the southeast at the Upper 450 level, of which 50 feet was through ore about a foot in width and somewhat below milling grade. The vein is at present cut off by a fault, but the chances of its being picked up again are good.

Fortuna Vein

The Fortuna vein was a very important place for mining operations in 1926. Development and exploration were 1,055.5 feet and ore production 8,558 tons, these figures being about double those of 1925.

Development and exploration results were very satisfactory as evidenced by the ore reserves which, notwithstanding the 1926 production, are as of January 1, 1927, 34,000 tons averaging 22 ounces silver, and .03 ounces gold, as against but 16,000 tons of the same value on the same date of the year previous.

A new level, the Upper 650, was established in the first part of the year, and the vein so far exposed therein shows no diminution either in width or value. There is every reason to believe this ore will continue above the Upper 650 for at least a hundred feet. In the course of development on the different levels, a branch vein 1.5 to 2.5 feet in width was found which in many places is ore-bearing. 1927 development is to proceed as extensively as work in adjacent veins will allow, and there is sufficient stoping area available to permit a much heavier ore output than in the year past.

Guadalupe Vein

No ore was mined, but a raise 195 feet in height was driven in a branch stringer from the Upper 150 level to connect this

level with the workings of the Guadalupe at the Upper 250 and 350 levels. The stringer proved ore bearing for about 50 feet. The raise is to serve as a central ladder and timber way for recovery operations in all the veins on the two levels mentioned where some ore and stope filling is expected. It will also serve as access to the North vein.

Independencia Vein

This vein produced 17,800 tons of ore which, though not as rich as that mined in the previous year, was, nevertheless, above milling grade. Development and exploration was much less than in 1925, being 2,236 feet as compared with 4,092.5 feet.

Continuation of the main vein has, so far, not been found either to the northwest or southeast at the Upper 150 level; but in the latter direction ore bearing stringers were picked up, two of which are expected to produce an important quantity of milling grade ore. Further exploration is well warranted in both directions, particularly in the southeastern section, where, even if the main vein should not exist, the stringers mentioned have possibilities.

Two raises, 250 feet apart, were driven from the Upper 350 level to a height of about 100 feet to explore the upper reaches of the vein. The upper portion of each raise shows marked improvement in the vein and would indicate that an extensive orebody has been penetrated. A new level, the Upper 450, is to be started to effect further exploration.

In view of the ore possibilities which last year's work has disclosed, and despite an ore output of 17,800 tons during the year, there is no decrease in ore reserves tonnage. This, as of January 1, 1927, is 34,000 tons. The average value per ton, however, has been reduced from 36 ounces silver and .08 ounce gold to 30 ounces silver and .07 ounce gold.

The raise, driven expressly for much needed ventilation, connected in April with the cross-cut driven from the surface to meet it. It solved the ventilation problem not only in the Independencia but in all the other veins north of it in the Esperanza country.

The Lower 650 Esperanza Cross-cut should intersect the vein in the latter part of 1927. This will be about 800 feet deeper than the present deepest point on the vein, the Upper 150 level. As the map of this vein shows, the best average width and value per ton exist at the Upper 150 level. From this and other considerations it is quite possible that ore resources below the Upper 150 will be greater than those above it.

Jucuara Vein

At the Upper 150 level a drift 10.5 feet long was driven on what is thought might be the westerly extension of the vein west of the Clarke tunnel. Owing to the Jucuara being so far away from the present seat of operations, work was suspended for the time being.

Northwest Vein

Ore production consisted of 2,545 tons of which 180 tons was stope-filling. The ore came from the Upper 500 level, but the stopes there have now reached such a height that mining is too expensive and not altogether safe. The ore still remaining will be mined from the Upper 600 level and this section is to be reached through a cross-cut to be driven from the Guadalupe vein. 72.5 feet of driving was done below the Zero level to open up an isolated pillar of ore which is now being mined.

Ore possibilities are about the same as a year ago. In view of this there has been no reduction in reserves despite the production of 2,545 tons in 1926.

Nueva Vein

The past year's work was the first since 1921, and consisted of drifting on the vein 130 feet to the east at the Lower 300 level and driving a cross-cut 35 feet.

While the main purpose of this work was to connect with the Colonia vein workings and for drainage, small bunches of low grade ore were found which it will pay to mine.

Rosario Vein

The output from this vein in 1926 was 4,082 tons of ore and 86 tons of Stope Filling. The ore was considerably above this vein's ore reserve average in value. Development was 888½ feet, devoted mostly to making available for mining ore pillars in the old workings. Year by year it becomes harder to get ore from this vein, but the ore reserves have not been decreased as it is believed the sections at present exposed will yield the quantity reported.

Salvador Vein

This vein yielded a record ore production of 47,840 tons, which represents about 44% of all the ore mined and milled in 1926. Mining was done on all levels with marked variation in vein width and ore values on the different levels.

Development and exploration in the past year was 2,719 feet. A new level, the Upper 650, was established and work thereon so far has shown the vein to be on the whole as good as on the lower levels. A raise is to be driven from this level and there is every reason to believe the ore will extend for at least a hundred feet. Exploration to the northwest, which on the lower levels resulted in nought, was fairly successful at the Upper 350 level, a distance of 270 feet driven in that direction exposing a vein which, though narrower than the average, can be mined at a profit. Picking up the vein again in this direction is considered important as the territory ahead is extensive. It is also believed that a branch vein exists to the east in this section. Accordingly a cross-cut was started in the past year to verify this at the Upper 350 level, but it has as yet not reached its objective. On this level also a cross-cut is being driven south to intersect any existing branch veins, and though nothing has been found up to the present time, there is every reason to believe, from indications in other places, that a vein or stringer probably exists. Work to the southwest on several levels, while disclosing some stoping ore, was mostly in a crushed zone. This zone probably is the same as that intersected by the Independencia Vein, and while ore bearing, such ore is low in grade and exists mostly in irregular and narrow stringers. Further work is well warranted on one of these stringers as it may prove to be the continuation of the main vein.

The Lower 650 Esperanza Cross-cut should intersect the vein in the early part of 1927. The deepest point on the vein at the present time is in a 50 foot winze at the Zero level, this point being about 640 feet above the Lower 650. The vein in the winze has about average width and value, which leads to the belief that, even though commercial ore may not exist as deep as at the Lower 650, it will be found not a great distance above.

As regards ore reserves these, as of January 1, 1927, stand at 87,000 tons averaging 26 ounces silver and .03 ounce gold. Making comparison with the reserves of the year previous it will be noted that not only has there been no reduction in average value, but the quantity has been increased by 7,000 tons despite an output of 47,840 tons in the past year.

San Benito Vein

This vein was intersected by the Upper 150 Esperanza cross-cut in November, 1925, and is situated 700 feet south of the Independencia vein. At the point of intersection it was a narrow stringer, but exploration, particularly to the east, resulted in great improvement. A vein 0.9 foot wide, averaging after being mined,

about 30 ounces silver and .50 ounce gold, was opened up for a distance of over 300 feet. This vein carries a very much higher proportion of gold than any other in the Esperanza section and in this respect further bears out the theory, expressed some years ago, that veins intersected by the Esperanza cross-cut south of the Salvador would tend to carry a higher percentage of gold. The ground is somewhat faulted, with the result that the vein is displaced in some sections.

In the past year exploration and development consisted of 644.5 feet of which 533 feet were drifted on the vein at the Upper 150 level. A raise 94.5 feet high shows that the vein, while retaining its value, tends to become narrower and the surrounding rock more fractured. This, however, may only be an isolated condition, further exploration in the upper reaches showing that its general character is about the same as at the Upper 150 level. Owing to the narrowness of the vein, only such exploratory raises as are absolutely necessary are to be driven. Exploration for vertical extent is to be done mostly through stopes. In conformity with this a stope was started in the latter part of the year, the ore output therefrom being so far, 1,416 tons.

An ore reserve estimate of 3,000 tons averaging 30 ounces silver and .30 gold per ton is reported.

San Blas Vein

This vein was intersected by the Upper 150 Esperanza cross-cut in January, 1923, and is located 225 feet north of the Independencia vein. Like the San Benito, it is a small stringer at the point of intersection, but drifting to the east for a distance of 130 feet showed material improvement, the vein being for 100 feet about one foot wide, and probably will average after being mined around 30 ounces silver, and .06 ounce gold. The vein is somewhat broken up, the ground in which it occurs being soft and fractured. At the present time the Upper 150 east heading shows only a 3-inch stringer, and in the west heading about the same conditions exist. A stope was started to explore the vertical extent, but the vein decreased to a stringer too narrow to work. Owing to the proximity of this vein to the Independencia, a cross-cut was started from the latter at the Upper 250 level and the vein intersected last March. At this elevation the vein shows marked improvement, though rather irregular, and of the 231 feet driven up to the present time 125 feet can be considered in ore about 1 foot wide averaging after mining around 25 ounces silver, and .05 ounce gold. Another cross-cut is being driven from the Upper 250 Independencia level farther to the east to

intersect the vein at this point. If showing promise at this point, a cross-cut is to be driven to intersect it from the Upper 350 Independencia level.

Exploration and development consisted of 352.5 feet in the past year, and ore production was 456 tons, most of it from development.

An ore reserve estimate of 2,000 tons averaging 30 ounces silver and .06 gold is reported.

Santa Fe Vein

This vein, which consists of loose white quartz about two feet wide, with occasional narrow streaks of ore on the walls, was intersected by the Upper 150 Esperanza cross-cut last February at a point 925 feet south of the Independencia vein. Exploration up to the present time consists of 313.5 feet. Owing to looseness of the vein, and in order to avoid timbering, a drift paralleling the vein and short cross-cuts were run from this drift to explore it. The last cross-cut shows the vein to be divided into two stringers, each practically valueless. Driving is to be done on the most promising one to the east, as perhaps this may intersect the San Benito, in which case there would be some possibility of its being ore bearing.

Owing to there being so little known about this vein at the present time, no ore reserve estimate has been made; but it is believed that a small quantity of rather low grade ore will be obtained from the section already opened up.

San Luis Vein

The San Luis was interested by the Upper 150 Esperanza cross-cut in September, 1925, at a point 610 feet south of the Independencia vein. Exploration and development in the past year consisted of 210.5 feet of which 105 feet was a raise to explore the upper section of the vein. After drifting 105.5 feet to the east at the Upper 150 level, the vein, which is about one foot wide and ore bearing, split into stringers and the work in progress at the present time is following one of these to see if it is the main vein. In the raise the vein is cut off by a fault, but from similar conditions in the San Benito, about 200 feet distant, it is believed it has been displaced to the south and will be picked up again. As in other veins of similar character, its vertical extent should be explored by stoping, as the cost of driving expensive raises would (due to narrowness of the vein) disclose only a small amount of ore, absorbing any possible profit.

Ore production in the past year was 422 tons, mostly from development excavations. An estimate of 1,000 tons averaging 28 ounces silver and .05 ounce gold is included with the general reserves.

Santa Gertrudis Vein

In 1926, 5,569 tons of ore were produced, exploration and development being 1,108 feet. Development to the south, at the Upper 250 level, was mostly in ore which, when broken for the mill, will average milling grade. Driving southward at the Upper 350 level disclosed a vein on the whole too narrow to be mined. Work here has been stopped as the territory ahead will be developed by a stope which is being taken up from the Upper 250 level. At the Upper 150 level driving to the south disclosed bunches of ore, but the heading has been stopped as the vein is cut off by a fault. This same condition exists in the Upper 250 heading, but driving either this or the Upper 150 is to be resumed in the coming year as it is believed the vein may continue beyond the fault. At the Zero level a short cross-cut is being driven from the Southwest vein to connect with the Santa Gertrudis. An important body of first class ore is expected here. At the Upper 350 level connection was made with the Southwest vein workings to determine if it will pay to rework these.

San Vicente Vein

The only work during 1926 consisted of 118.5 feet of drifting at the Upper 350 level for the purpose of making connection with the Capitana and Socorro veins.

Socorro Vein

The old workings at the Upper 350 level were recovered early in the year. A drift was driven on the vein to the north 118 feet, of which 100 feet is in ore about .9 foot wide. After it is mined it should average around 20 ounces silver and .05 gold. Ore production was 398 tons mostly from development excavations.

In view of what past year's work has disclosed the ore reserve estimate has been increased by 1,000 tons.

South San Miguel Group

Of the 664 feet of development in 1926 over half was on the branch vein at the Upper 350 level to make connection with the Culebra, and at the same time develop the branch vein. About 150 feet of ore was disclosed and more is expected before the connection is made. This ore is the downward extension of a

body at the Upper 450 level which is being stoped. The vein is about a foot wide and after mining should average not less than 18 ounces silver and .07 gold per ton. The indications are that a substantial quantity of ore will be obtained from this branch vein.

In the South San Miguel vein itself development consisted wholly in making available for stoping ore exposed on the Upper 350 and Upper 450 levels.

It was not possible to drive southeast on the San Miguel to explore its possibilities in that direction. However, this work may be started in the coming year.

Ore production was 4,214 tons, but the ore reserves were decreased only 3,000 tons, and as of January 1st, 1927, are 27,000 tons averaging 17 ounces silver and .06 ounce gold. While the average assay value of the South San Miguel Group is higher, the ground is soft and veins very irregular, making clean mining impossible, hence the low average of the reserves.

Southwest Vein

The shaft from the Upper 150 level was sunk 425 feet during the year and now is 222.5 feet deep. At the bottom the Lower 100 level has just been started and work therein in the next year should determine the lateral ore limits of the vein at this depth.

As connection with the Upper 350 level was made from the Santa Gertrudis it is probable that stoping of some remaining ore pillars will begin shortly.

Termopilas Vein

The main exploration raise was advanced 28 feet and is now 279 feet above the Upper 150 level. This and previous work has been disappointing as the vein becomes narrower and poorer as the raise advances; but at the surface rich ore was mined in the past, which leads to the belief that perhaps the raise is not on same vein.

The best way to explore this vein will be by stoping the ore already exposed. No more work is to be done in the raise for the time being.

The production was 335 tons mostly of very low grade.

Upper 150 Esperanza Cross-cut

This cross-cut, which for the past year has been the most important exploration project in the Mine, was advanced 687 feet in 1926. The last 209 feet driven are in what possibly is a rhyolitic shale in which no veins are looked for. On the surface,

in the close vicinity, this shale cannot be found, which leads to the belief that it may be only an island or rib projecting at the Upper 150 level elevation. Based on this, the cross-cut is to be continued through this formation in the belief that the vein-bearing rhyolite rock in its original state will be entered on the other side.

Driving at this cross-cut was stopped last December to permit more rapid exploration of some of the many stringers cut in the past two or three years. So far those showing promise are the San Blas, San Luis, San Benito and Santa Fe veins, already described.

Lower 650 Esperanza Cross-cut

This cross-cut was advanced 1,633 feet in 1926, and on January 1, 1927, was 3,278.5 feet long.

As stated elsewhere, its purpose is to intersect all the veins of the Esperanza country. The Salvador should be intersected next March or April and the Independencia about four months later. Should work in the San Luis, San Benito and other veins south of the Independencia show marked improvement, this cross-cut is to be extended beyond the Independencia to intersect them.

Large quantities of water at frequent intervals retarded greatly the driving, otherwise a much greater advance would have been made in 1926.

Besides being an exploratory project, this cross-cut will ultimately be connected with the Upper 150 Esperanza country and serve as a transportation tunnel for most of the ore therefrom.

Other Esperanza Cross-Cuts

Cross-cuts, more or less parallel to the upper 150 Esperanza cross-cut, but east and west of it, are to be driven at one or two of the upper levels from the Salvador vein. Their purpose is to explore the ground between the Independencia and Salvador veins, as it is quite likely some of the stringers intersected by the Upper 150 Esperanza cross-cut, which at its elevation are either too narrow or not ore bearing, may show marked improvement higher up.

Some of these cross-cuts already have been started.

Upper 150 Southwest Cross-cut

This cross-cut, which starts off the Salvador vein in Block 66, is more or less parallel to the Upper 150 Esperanza cross-cut

being located about 1,700 feet east of it. Its purpose is to explore the very large unknown territory to the south as well as to intersect the eastern extension of some of the veins or stringers already found by the Upper 150 Esperanza cross-cut.

This cross-cut is an important exploration project and arrangements are now being made to drive it more rapidly.

Upper 150 West Cross-cut

This cross-cut was started in the past year in Block 71 off the Southwest vein. Its purpose is to explore the territory between the Southwest and North San Miguel veins which is very extensive and considered promising. It was 242.5 feet long on January 1, 1927.

MINE EQUIPMENT

Electric Haulage Lower 650 Level

The Lower 650 level electric haulage, consisting of about 13,000 feet of 24-inch, 35 lb. rail track and trolley, two 7-ton locomotives and 57 - 25-cubic foot steel cars, rendered satisfactory service during the year. Upkeep expense was moderate, but possibly will be heavier in 1927 due to necessity of rail replacement in many sections.

Upper 150 or Pena Blanca Level

The haulage equipment on this level, consisting of about 28,000 feet 24-inch gauge, 35 lb. rail track, four locomotives and 85 - 25 cubic foot steel cars, is not in good shape. In the past year the locomotives were a source of no little trouble and expense, and the volume of car repairs frequently exceeded shop capacity. If haulage costs and delays are to be kept at a minimum, haulage equipment must be in good condition and effective steps are being taken with that end in view.

Hand Haulage

The hand haulage particularly must be kept in good condition at all times, otherwise tramming costs increase and difficulties arise in obtaining sufficient labor for tramming work, a purely physical effort, when the track and cars are in poor shape. In the past year repairs and replacements fell somewhat below requirements, but this difficulty is to be made up in the very near future.

The old sections of the mine, now being recovered, have to be retracked entirely, and it is anticipated that several thousand feet of such work will be done in 1927.

Pipe Lines

Several sections of compressed air piping, in use many years, are not in good condition. To avoid excessive air losses and delays to drilling by constant repairs, new piping in most needed places is to be installed in the near future.

Mine Office and Warehouse at Pena Blanca Level

The extent of these installations was covered in the 1925 Annual Report. Occupancy commenced in October and it has been found that owing to this site being much more conveniently located with respect to the present seat of mining operations than the old site, a mile and a quarter away, several important advantages have been gained amongst which are better control over outgoing supplies and closer supervision of adjacent shops and compressor plant.

Air Compressor Plant

Two Ingersoll-Rand P. R. E. Type remodeled compressors of 2,120 cubic feet free air per minute capacity each, and each direct connected to a 415 H. P. Induction Motor.

One Ingersoll-Rand Imperial Type 950 cubic feet per minute capacity compressor direct connected to a 175- H. P. Synchronous Motor.

Nearly all the repairs and improvements described in last year's report were concluded in 1926. About the only remaining installation is that of the after-coolers, and as the requisite material has been ordered, these should be in service early in 1927.

The improved condition of this plant now assures continuous service as satisfactory as that of the past 17 years.

Rock Drills and Drill Steel

There were no large additions to rock drill equipment in 1926, but in the coming year it may be necessary to replace a number of drills because of wear.

Decreasing the cross-section of drill steel and bit thereon and standardization to two sizes, ¾ inch quarter octagon (square) and 1 inch round hollow for drifting, has effected, due to the small diameter hole drilled, a saving in dynamite.

Automobile Road

An automobile road, about 3 miles long, is being built between the lower works and the Pena Blanca level, the present center of mining operations, so that the greatly increased amount of mine supplies can be handled by auto truck instead of by

pack mules and bull carts, as at present. The road should be finished by March. The use of an auto truck will now make unnecessary the immediate purchase of animals to replace those which have died or are no longer serviceable. A one-ton truck was ordered and arrived on the property under its own power.

THE MILL

Tonnage Crushed

	1926	1925
Total wet tons received	123,269	117,991
Average percent moisture	10.8	10.3
Total dry tons milled	110,700	105,850
Average tons per day milled (365 days)	303	290
Average tons per day milled, full running time (303.706 days)	364	
Average tons per day milled, full running time (305.476 days)		346
Average tons per day milled per 1,850 lbs. stamp	18.2	17.3
Number of 1,850 lbs. stamps	20	20
Total tons treated by present mill to December 31, 1926	1,479,408	

Recovery

	1926	1925
Average ounces silver received per ton	24.698	25.075
Total ounces silver received	2,732,069	2,654,230
Average ounces silver recovered per ton	22.649	23.052
Total ounces silver recovered	2,501,542	2,440,042
Average silver recovery, percent	91.70	91.93
Average ounces gold received per ton	.0558	.0409
Total ounces gold received	6,177	4,334
Average ounces gold recovered per ton	.0528	.0384
Total ounces gold recovered	5,830	4,062
Average gold recovery, per cent	94.62	93.89

Supplies Used

	1926 Per Ton of Ore Crushed	1925 Per Ton of Ore Crushed	1926 Per Oz. Fine Bul'n Produced	1925 Per Oz. Fine Bul'n Produced
	Tonnage 109,670	Tonnage 105,850	Grade of Ore Ag. 24.698 Au. .0558	Grade of Ore Ag. 25.075 Au. .0409
Cyanide (100% KCN)	4.947 lbs.	5.882 lbs.	.21916 lbs.	.25474 lbs.
Zinc Dust	1,052 "	.991 "	.0465904 "	.042917 "
Muriatic Acid	.053 "	.056 "	.0023382 "	.0027572 "
Lime, 100%	22.393 "	15.930 "	.992106 "	.6899010 "
Borax	.038 "	.048 "	.0016967 "	.0020780 "
Soda	.015 "	.020 "	.0006464 "	.0008776 "
Fuel Oil	.045 gals.	.062 gals.	.0020138 gals.	.0026844 gals.
Artificial Pebbles	38.692 lbs.	62.834 lbs.	1.7142426 lbs.	2.7212426 lbs.
Foreign Pebbles	2.0939 "	1.753 "	.0927691 "	.0759223 "

ORE ANALYSIS

The following is a comparative analysis of the average ore treated.

	1926	1925
Silica (S1,02)	75.61%	72.98%
Alumina (A12,03)	3.94%	3.72%
Iron (Metallic)	3.47%	3.12%
Manganese	0.97%	0.72%
Lime (CaO)	0.57%	0.60%
Magnesia (MgO)	1.08%	1.37%
Zinc	0.87%	1.38%
Antimony	0.016%	Trace
Arsenic	0.01%	Trace
Lead	0.17%	0.19%
Sulphur	1.56%	1.33%

Recovery

Silver recovery in 1926 was slightly lower than in the previous year. The fall is attributed mainly to coarser crushing, as is indicated by the percentage of plus 150 in the mill tailings. This was due to intermittent milling because of an unusually dry season. Given normal power conditions and no great change in the character of the ore, the silver recovery in 1927 should exceed that obtained in 1925.

Recovery Detail

	1926				1925			
	Hrs.	Min.	Ag.%	Au.%	Hrs.	Min.	Ag.%	Au.%
Extraction by Crushing Solution	9	00	34.45	74.19	9	00	36.22	78.19
Extraction by Agitation	85	35	57.25	20.25	75	08	55.64	14.72
Extraction in Slimes Presses	1	05	.46	.54	1	05	.69	1.71
	95	40	92.16	94.98	85	13	92.55	94.62
Less Dissolved Value Loss			.46	.36			.62	.73
Recovery			91.70	94.62			91.93	93.89
Percent Sand not passing 150 mesh			21.76				16.49	

Cyanide Recovery Process

Installation of the Cyanide Recovery Process was concluded in June and continuous operation commenced at once. No definite figures will be available until the process has been in operation for at least a year, so that all variable factors may be considered.

Electrolytic Precipitation

Electrolytic precipitation, which would do away with the use of zinc dust and would effect a saving of cyanide over and above that obtained by the use of the Cyanide Recovery Process, is being investigated. A member of the Mill staff was sent to Nevada to study the operation of this process. It is not as yet possible to estimate its value at Rosario, but experiments on a small scale are being made with the hope of obtaining more definite information.

Refinery

The average cost of producing a bar of Dore Bullion from precipitate was $7.26, as compared with $8.39 in 1925.

POWER

Rainfall

	1926	1925	1924
Total Rain, Inches	48.78	55.61	66.47
Number Rainy Days	134	200	203
Greatest Monthly Rainfall	10.69 (Sept.)	11.15 (Sept.)	13.79 (Oct.)
Lowest Monthly Rainfall	.09 (April)	.30 (Feb.)	.19 (Mar.)
Greatest Single Rainfall	1.53 (Aug.)	2.46 (June)	3.53 (Oct.)

HYDRO-ELECTRIC PLANTS

San Juancito Plant

Static Head.....1,357 feet.
Pipe Line .....4,379 feet of 20", 17" and 14" pipe.
Equipment .....2—500 KVA, 6,600 volts, 60 cycles, A. C. Generators, each coupled directly to a 675 H. P. Pelton Wheel.
Flume Lines.....The Escobales and Aguacatal; built of wood, total length 17,000 feet.

Guadalupe Plant

Static Head.....491 feet.
Pipe Line .....2,350 feet of 20" pipe.
Equipment .....2—350 KVA, 6,600 volts, 60 cycles, A. C. Generators, each directly connected to a 450 H. P. Pelton Wheel.
Flume Lines.....The Guadalupe, 6,000 feet in length, of wood.

POWER DISTRIBUTION

	1926		1925	
	Kilowatt Hours	K.W.Hours Per Ton	Kilowatt Hours	K.W.Hours Per Ton
Mine Power	2,055,636	18.744	2,004,810	18.940
Electric Haulage	258,511	2.357	337,550	3.188
Mine Lights	18,000	.164	18,000	.170
Mill Power	3,811,163	34.751	3,716,990	35.116

Mill Lights	24,000	.219	24,000	.227
Surface Lights	24,000	.219	24,000	.226
Surface Power	92,000	.839	120,000	1.134
Machine Shop	24,000	.219	24,000	.227
Laboratory	6,000	.055	6,000	.057
Totals	6,313,310	57.567	6,275,350	59.285

Power Produced By

Guadalupe Plant	38.4%	45.9%
San Juancito Plant	61.6%	54.1%

COST OF POWER PRODUCTION

	1926			1925		
	Amount	Per Ton	Per K.W.Hr.	Amount	Per Ton	Per K.W.Hr.
Labor	$14,313.79	.13052	.002267	$16,342.67	.15439	.002604
Supplies	3,934.06	.03587	.000623	5,867.11	.05543	.000935
Total	$18,247.85	.16639	.002890	$22,209.78	.20982	.003539

Based on Horsepower Generated

	1926	1925
Horsepower Hours	8,462,882	8,411,997
Cost per Horsepower Hour	$ 0.00216	$ 0.00264
Cost per Horsepower Year	$ 18.92160	$ 23.12640
Cost per Horsepower Year, Decrease	$ 4.20480	

The 1926 rainfall, with but one small exception, is the lowest since 1914, and being distributed over but 134 days, was of further disadvantage. Nevertheless, 37,960 Kilowatt Hours more were produced, this being due almost entirely to the possibility of water storage in the new San Juancito Power Plant Reservoir and greater efficiency of this plant.

Remodeling of Power Plants

In the 1925 Annual Report it was stated that additions of machinery at the Mine and the mill had taxed the two power plants beyond their capacity at peak load periods and that steps had been taken to remedy this serious condition. In August the capacity of the San Juancito plant was increased from 850 K. W. to about 1,200 K. W. No additional electric generator was installed, but instead the capacity of the two existing generators raised by correction in power factor. The old and obsolete water wheels were replaced by larger and more efficient ones to take care of the increased generator capacity. Load regulation is effected automatically at the nozzles instead of by jet deflection as formerly, the jet deflector now serving only as an extra safety measure. Besides making the plant automatic a material saving in water is made which, in combination with the new reservoir

of around 125,000 cubic feet capacity, will add considerably to the power supply in the dry season.

The Guadalupe Plant is to be remodeled in 1927 and its capacity increased from 510 K. W. to about 800 K. W. Here, however, the two electric generators are of greater capacity than the water wheels and penstock. Larger and more efficient water wheels are to be installed as well as an entirely new penstock of adequate diameter, the present penstock being in very bad condition.

Transmission Lines

The 26,000 feet of high power transmission lines are equipped with wooden poles and the latter are a source of no little trouble and expense due to the necessity of frequent changing, as wood, even if treated with preservative, does not last very long in this climate. In the coming year the question of using steel poles or towers is to be investigated, and unless the cost of these is excessive it would pay to install them, as once in place upkeep cost would be very small and accordingly the number of line men on the payrool reduced.

Flume Lines

A wooden flume 12 inches by 14 inches in cross section and 3,900 feet long was built to carry water in excess of milling requirements from the Lower 650 level entrance to the Aguacatal dam where it will be utilized for power through the San Juancito plant in the dry season. A motor driven centrifugal pump of 150 cubic feet per minute capacity has been ordered and is expected to arrive in time to be of service during the 1927 dry season. While the pump will lift the water only about eight feet, the head under which this water will generate power will be that of the San Juancito Plant, or 1,357 feet. An average constant flow of about 75 cubic feet per minute is expected. In the dry season, when there is power shortage and operations drop to about 50% capacity, this extra power will prove of very material aid. The advantage gained over one dry season should pay for the entire installation.

MECHANICAL DEPARTMENT

Machine Shop

The new shop is well equipped to take care promptly not only of current repairs but, in combination with the foundry, to manufacture at comparatively very small cost a number of articles it formerly was necessary to buy. As conditions require, additions are made to shop equipment and in the past year a much needed shaper was ordered.

Foundry

The foundry which commenced functioning in November, 1925, has proved very successful. In the past year car wheels, mill liners and some wearing parts for general mill machinery were turned out in quantity. Considering that freight alone is about $60.00 per ton, that one ton of coke will produce about 7 tons of castings and that several years' supply of scrap material is on hand, the saving effected is a very material one.

OTHER DEPARTMENTS

Medical Department

	1926	1925
Total number of patients	.....	3,834
Total consultations, examinations, treatments	11,127	.....
Cost of maintenance	$ 6,256.23	$ 7,180.76

Assay Office And Laboratory

	1926	1925
Total number of assays run	24,747	21,274
Average number of assays per day	75	58
Total cost	$ 6,019.37	$ 6,341.92
Cost per assay	.25	.30

Hotel

	1926	1925
Total number of meals served	30,644	33,167
Total Cost	$16,415.16	$18,231.46
Cost per meal	.535	.55

Roads

	1926	1925
Total maintenance	$ 3,433.51	$ 3,411.62
Increase	21.89	.....

Schools

	1926	1925
Average daily attendance during year:		
Boys' School	116	86
Girls' School	114	89
Total expense	$ 7,159.04	$ 7,056.61

Police and Garrison

	1926	1925
Total maintenance expense	$ 8,064.30	$ 8,772.34
Decrease	$ 708.04	.....

Agencies

	1926	1925
Total expense	$ 3,662.73	$ 3,623.12
Increase	$ 39.61	.....

EXPANSION

Full description of the extent, character and location of mining properties owned by the Company, but outside the Rosario Zone, is given in previous Annual Reports.

During 1926 a comparatively small amount of work was done on Expansion projects. The properties on which some work was done are the following:

Sabana Grande Honduras Mining Company

Any work done at this property during 1926 was for the purpose of opening up for stoping the ore that remains in the mine.

Total expenditures in 1926 were $24,776.57.

Moloncosa

This zone is being operated on a royalty basis. Production in 1926 was 3.3 ounces silver and 24.4 ounces gold, but should be greater in 1927. There were no expenditures in 1926.

Aurora-Santa Elena

The exploration outlined in the 1925 report was continued in 1926. It was stopped in July to give preference to work on an adjacent mineral zone acquired in the early part of the year.

Total expenditures in 1926 were $8,551.58.

CONCLUSION

The year 1926 marks a new record for silver production in the history of the Company. The production of gold is the highest since 1920, the substantial increase being due to more intensive mining in the gold-bearing sections. There is every reason to believe that, given normal operating conditions, the silver output in 1927 should more or less equal that of 1926, and that of gold should be increased.

The ore reserves show a substantial increase compared with those reported a year ago notwithstanding a record production of silver during 1926. The increase is due mostly to a greater ore extent in producing veins, particularly of the Esperanza section. No new veins of importance were found during the year, but exploration work started on several stringers previously intersected by the Esperanza Cross-cut indicates that some of these are promising, it already being possible to assign them a small ore reserve.

The outstanding improvements made in 1926 were the remodeling of the San Juancito Power Plant, installation of the Cyanide Recovery Process and of the Foundry. These improvements should contribute to a reduction of operating costs.

Mechanical, electrical and other equipment is showing increased signs of wear, after about 15 years' continuous use, but replacements and repairs are being made promptly. This item of expense is an increasing one, but unavoidable if the plant is to be kept at the highest point of efficiency.

This opportunity is taken to express appreciation for the fullest support and confidence received from you, the Officers and members of the Board of Directors in the past year, and to draw attention to the faithful service rendered by the Staff to whom credit for what has been accomplished in 1926 largely belongs.

Respectfully submitted,

A. R. GORDON,
General Manager.

Annex "A"
Summary of Calculated Ore Reserves
(At 13 cu. ft. per ton)

VEINS	Av. Width Ft.	Per Cent Waste	Tons of Ore & Waste	Ozs. Ag. per Ton	Ozs. Au. per Ton	Total Ozs. Ag.	Total Ozs. Au.
Carmen	1.8	50	14,500	30	.04	435,000	580
Culebra	1.7	35	28,000	16	.05	448,000	1,400
Fortuna	1.5	40	34,000	22	.03	748,000	1,020
Independencia	2.0	40	34,000	30	.07	1,020,000	2,380
Salvador	2.2	40	87,000	25	.03	2,175,000	2,160
Santa Gertrudis	1.0	70	16,000	22	.03	352,000	480
San Joaquin	1.0	60	9,500	15	.12	142,500	1,140
North San Miguel	1.6	35	4,800	15	.06	72,000	288
South San Miguel Group	1.4	40	27,000	17	.06	459,000	1,620
Southwest	1.5	40	8,000	18	.04	144,000	320
Totals			262,800	22.81	.045	5,995,500	11,838

Summary of Estimated Ore Reserves
(At 13 cu. ft. per ton)

Buena Ventura	3,000	12	.06	36,000	180
Candelaria Group	5,000	12	.06	60,000	300
Capitana	3,000	10	.13	30,000	390
Catalina	3,000	14	.05	42,000	150
Colonia	4,000	14	.07	56,000	280
Esperanza	1,500	15	.05	22,500	75

Guadalupe	1,000	12	.03	12,000	30
Jucuara	2,000	12	.05	24,000	100
North	2,000	14	.05	28,000	100
Northwest	4,000	14	.05	56,000	200
Nueva	1,500	12	.05	18,000	75
Porvenir	2,000	13	.05	26,000	100
Rosario	7,000	12	.06	84,000	420
San Benito	3,000	30	.30	90,000	900
San Blas	2,000	30	.06	60,000	120
San Luis	1,000	28	.05	28,000	50
Socorro	2,000	14	.05	28,000	100
West	2,000	13	.03	26,000	60
Totals	49,000	14.83	.074	726,500	3,630

Summary of Estimated Stope Filling (At 17 cu. ft. per ton)

Candelaria	3,000	10	.04	30,000	120
Guadalupe	2,000	10	.03	20,000	60
Rosario	2,500	10	.04	25,000	100
West	1,500	10	.03	15,000	45
Buena Ventura	1,000	10	.03	10,000	30
Totals	10,000	10	.0355	100,000	355

Summary of Broken Ore in Stopes (At 21 cu. ft. per ton)

Total	17,380	25.20	.058	438,000	1,008

Total Summary

Calculated Ore	262,800	22.81	.045	5,995,500	11,838
Estimated Ore	49,000	14.83	.074	726,500	3,630
Estimated Stope Filling	10,000	10.00	.0355	100,000	355
Broken Ore in Stopes	17,380	25.20	.058	438,000	1,008
Totals	339,180	21.40	.049	7,260,000	16,831

339,180 tons of ore averaging at Mill: Silver 21.40 Ozs.
Gold .049 Ozs.

Annex "B"
BROKEN ORE IN STOPES
(At 21 cu. ft. per ton
Total by Veins

VEINS	Tons
Buena Ventura	250
Candelaria	1,260
Catalina	134
Colonia	300
Culebra	3,887
Fortuna	1,951
Independencia	2,124

Rosario	1,904
Salvador	5,030
Santa Gertrudis	100
South San Miguel	150
Chute No. 36	140
Chute No. 51	150
Total	17,380

Value per ton: Ounces silver.....25.20)
Value per ton: Ounces gold ..... .058) Average of ore milled during last 6 months of 1926.

Annex "C"
Exploration and Development for the Year 1926

Location	Drifts	Cross cuts	Raises	Winzes	Total feet
Buena Ventura	83.0	.....	.....	.....	83.0
Candelaria Group	175.0	54.0	278.0	.....	507.0
Carmen	21.0	43.5	.....	.....	64.5
Colonia	10.0	.....	2.5	.....	12.5
Culebra	739.0	86.5	114.0	.....	939.5
Esperanza	65.0	.....	.....	.....	65.0
Esperanza Cross-cut (U-150)	.....	687.0	.....	.....	687.0
Esperanza Cross-cut (L-650)	.....	1,633.0	.....	.....	1,633.0
Esperanza Cross-cut Str. (Sta.146)	33.0	.....	.....	.....	33.0
Esperanza Cross-cut Str. (Sta.148)	4.0	.....	.....	.....	4.0
Fortuna	843.5	87.0	125.0	.....	1,055.5
Guadalupe	.....	.....	195.0	.....	195.0
Independencia	840.0	602.5	793.5	.....	2,236.0
Jucuara	10.5	.....	.....	.....	10.5
Nueva	130.0	35.0	.....	.....	165.0
Northwest	72.5	.....	.....	.....	72.5
Rosario	375.5	249.5	263.5	.....	888.5
Salvador	1,566.5	372.5	780.0	.....	2,719.0
Esperanza Cross-cut Str. (U-350-B-71)	.....	160.0	.....	.....	160.0
South Cross-cut (U-150-Block 66)	.....	273.0	.....	.....	273.0
San Benito	533.0	17.0	94.5	.....	644.5
San Blas	295.5	.....	57.0	.....	352.5
San Luis	105.5	.....	105.0	.....	210.5
Santa Fé	274.0	39.5	.....	.....	313.5
Santa Gertrudis	700.0	8.0	400.0	.....	1,108.0
San Vicente	56.5	62.0	.....	.....	118.5
Socorro	118.0	19.0	15.5	.....	152.5
South San Niguel Group	500.5	136.5	27.0	.....	664.0
Southwest	18.0	.....	.....	42.5	60.5
Termopilas	.....	.....	28.0	.....	28.0
West Cross-cut (U-150-Block 71)	.....	242.5	.....	.....	242.5
Surface Drifts and Cross-cuts	150.0	81.0	.....	.....	231.0
Totals	7,719.5	4,889.0	3,278.5	42.5	15,929.5
CONNECTIONS					
Esperanza Cross-cut to Salvador (150)	.....	334.0	.....	.....	334.0
GRAND TOTAL					16,263.5

Annex "D" ORE PRODUCTION 1926 (Dry Tons)

From Stoping Operations—

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Buena Ventura	29	86	45	.....	.....	.....	38	79	136	12	.....	.....	425
Candelaria Group	.....	.....	.....	63	91	59	57	158	486	185	8	.....	1,107
Capitana	.....	.....	92	129	34	19	47	161	90	177	256	294	1,299
Carmen	251	201	196	341	56	73	.....	.....	.....	.....	.....	.....	1,118
Catalina	159	64	48	.....	6	64	8	.....	57	100	.....	17	523
Colonia	.....	.....	.....	.....	.....	.....	.....	25	47	86	80	41	279
Culebra	801	801	634	592	347	345	457	498	777	1,143	1,269	1,222	8,886
Fortuna	971	703	676	335	169	42	591	690	550	646	600	485	6,458
Independencia	163	491	695	970	936	1,634	1,992	1,542	1,793	1,704	2,080	2,343	16,343
North	.....	18	6	.....	52	20	.....	.....	.....	.....	.....	.....	96
Northwest	355	162	399	459	616	173	.....	.....	.....	.....	.....	127	2,331
Nueva	.....	.....	.....	.....	31	6	13	46	44	26	.....	.....	166
Rosario	326	269	439	229	147	145	189	457	333	452	301	451	3,738
Salvador	4,583	4,022	3,090	3,370	3,336	3,746	3,620	5,274	4,763	2,834	3,295	3,054	44,987
San Benito	.....	.....	.....	.....	.....	.....	.....	.....	.....	126	86	187	399
Santa Certrudis	437	466	554	237	159	220	95	250	335	571	389	484	4,197
San Luis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	38	68
South San Miguel Group	530	252	294	226	279	210	153	355	390	412	428	313	3,842
Socorro	.....	.....	.....	5	46	40	12	.....	.....	19	101	.....	223
Termopolis	53	16	.....	.....	.....	19	.....	.....	.....	43	100	104	335
Totals	8,658	7,551	7,168	6,956	6,345	6,815	7,272	9,535	9,801	8,536	9,023	9,160	96,820
From Development Excavations—													
Buena Ventura	107	43	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	150
Candelaria Group	11	96	20	22	.....	15	41	.....	.....	10	.....	.....	215
Colonia	56	32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
Culebra	134	103	159	227	178	141	117	71	13	.....	.....	.....	1,143
Esperanza	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	24	44
Fortuna	59	23	38	15	31	139	93	165	281	468	409	379	2,100
Guadalupe Stringer	.....	.....	.....	.....	.....	.....	16	.....	.....	.....	.....	.....	16
Independencia	305	180	89	.....	8	126	92	235	156	109	114	43	1,457
Northwest	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	.....	20	34
Nueva	.....	12	85	26	12	.....	.....	.....	.....	.....	.....	.....	135
Rosario	100	35	9	.....	.....	.....	.....	.....	.....	69	131	.....	344
Salvador	489	446	440	294	98	107	169	177	193	118	122	200	2,853
San Benito	.....	.....	8	10	.....	.....	9	72	279	180	225	234	1,017
San Blas	.....	.....	7	.....	.....	.....	.....	46	82	104	109	108	456
Santa Fe	.....	.....	.....	.....	.....	.....	.....	.....	.....	50	.....	.....	50
Santa Gertrudis	307	212	178	70	10	44	52	111	114	153	109	12	1,372
San Luis	117	110	15	11	22	.....	41	34	4	.....	.....	.....	354
South San Miguel Group	.....	.....	.....	.....	.....	.....	.....	6	77	82	31	176	372
San Vicente	38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
Socorro	.....	.....	.....	.....	.....	.....	.....	85	81	9	.....	.....	175
Totals	1,723	1,292	1,048	675	359	572	630	1,002	1,280	1,366	1,270	1,196	12,413
From Stope Fills	.....	85	38	.....	.....	.....	50	16	23	.....	27	49	288
GRAND TOTALS	10,381	8,928	8,254	7,631	6,704	7,387	7,952	10,553	11,104	9,902	10,320	10,405	109,521

Annex "E"

Tonnage Mined From October 1, 1907 to January 1, 1927

Veins	Total including Stoping, Devel. & Filling Oct. 1/07 to Dec. 31/25	Total including Stoping, Devel. & Filling Year 1926	Grand Total including Stoping, Devel. & Filling January 1, 1927
Buena Ventura	97,544	575	98,119
Candelaria Group	162,701	1,322	164,023
Capitana	52,945	1,299	54,244
Carmen	16,408	1,118	17,526
Catalina	4,498	523	5,021
Colonia	51,969	367	52,336
Concepcion	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	74,394	10,029	84,423
Esperanza	8,666	44	8,710
Fortuna	14,073	8,558	22,631
Guadalupe	60,875	16	60,891
Independencia	24,310	17,800	42,110
Jucuara	2,207	.....	2,207
North	4,551	96	4,647
Northwest	78,870	2,554	81,424
Nueva	27,846	301	28,147
Porvenir	1,045	.....	1,045
Rosario	143,410	4,181	147,591
Salvador	134,478	47,840	182,318
San Benito	.....	1,416	1,416
San Blas	.....	456	456
San Joaquin	63,030	.....	63,030
San Luis	.....	422	422
San Miguel North	174,801	.....	174,801
San Miguel South Group	98,839	4,214	103,053
Santa Fe	.....	50	50
Santa Gertrudis	9,241	5,569	14,810
Socorro	19,810	398	20,208
Southwest	20,451	.....	20,451
Termopolis	668	335	1,003
West	96,533	.....	96,533
Ore from Development	63,599	.....	63,599
Miscellaneous	1,535	38	1,573
Totals	1,535,877	109,521	1,645,398

Summary

October, 1907 to January 1, 1927

From Stoping	1,296,936
From Development	116,100
From Fills	232,362
Total	1,645,398

Condensed Balance Sheet
New York & Honduras Rosario Mining Company
New York City
December 31st, 1926

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion	2,042,459.93	$ 957,540.07	
Plant, Buildings, Machinery and Equipment	1,447,157.21		
Less: Allowance for Depreciation	934,341.67	512,815.54	
			$1,470,355.61
Current—			
Cash		$ 44,939.41	
Call Loans plus Interest (Secured)		50,060.03	
Bullion at Smelters and In Transit at market			
Less: Allowance for Expenses		242,857.24	
Broken Ore in Stopes and Mill Bins—At Cost		77,665.01	
Materials and Supplies at Book Value—Less:			
Allowance for Shrinkage to Estimated Cost		286,312.22	
U. S. Securities at Market plus Interest		483,839.29	
Other Marketable Securities at Market plus Interest		$1,448,265.86	
			2,633,939.06
Other Assets			
Sundry Accounts Receivable		9,716.05	
Capital Stocks of Other Companies and Advances (Nominal Value)		1.00	
			9,717.05
Deferred Charges			
Prepaid Insurance, Taxes and Expenses			140,438.57
TOTAL ASSETS			$4,254,450.29

LIABILITIES

Current		
Drafts Payable	$ 34,001.46	
Accounts Payable	40,074.39	
Federal Income Tax—1926	49,692.74	
		123,768.59
Reserves		
Mine Fire Insurance	56,783.85	
Transit Insurance	17,462.22	
Dividends Payable—January, 1927	100,000.00	
		174,246.07
Carried forward		298,014.66

	Brought forward			298,014.66
Capital Stock				
Authorized and Issued—200,000 shares of a par value of $10.00 per share			2,000,000.00	
Surplus				
Earned		$1,326,382.73		
Appreciation of Mine Valuation	$1,500,000.00			
Less: Depletion Earned	869,947.10	630,052.90	1,956,435.63	3,956,435.63
				$4,254,450.29

Income and Profit and Loss Statement
New York & Honduras Rosario Mining Company
New York City
For the year ended December 31st, 1926

Production of Gold and Silver		$1,601,429.35	
Less: Freight and Expenses on Bullion		64,006.52	
Operating Income			$1,537,422.83
Deduct: Operating Expenses			851,938.08
Operating Profit			685,484.75
Deduct: New York Administrative Expenses			70,099.26
Net Profit from Operations			615,385.49
Other Income			128,721.07
			744,106.56
Other Deductions from Income			77,760.80
Net Profit Before Federal Income Tax and Provision for Reserves			666,345.76
Federal Income Tax			49,692.74
Net Profit for Year			616,653.02
Appropriated for Reserves—			
Ore Depletion		$ 230,756.26	
Mine Fire Insurance		6,816.03	
Transit Insurance		3,371.31	240,943.60
Profit for Year Carried to Surplus			375,709.42
Surplus—			
Surplus—January 1, 1926		2,007,556.25	
Additions—			
Increase in Market Values of Securities owned at December 31, 1926	$ 31,667.39		
Carried forward	31,667.39	2,007,556.25	375,709.42

Brought forward		31,667.39	2,007,556.25	375,709.42
Deductions—				
Dividends Paid and Provided	$ 400,000.00			
Federal Income and Profits Taxes for Prior Years and Expenses incident thereto	58,497.43	458,497.43	426,830.04	1,580,726.21
Surplus—December 31, 1926				$1,956,435.63

Auditor's Certificate

WE HEREBY CERTIFY that we examined the books of account and record of the NEW YORK & HONDURAS ROSARIO MINING COMPANY, NEW YORK CITY, for the year ended December 31, 1926 and, subject to the fact that we did not examine the records at the mine office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at December 31, 1926 and that the related Income and Profit and Loss Statement is correct.

(Signed) ERNST & ERNST.

(Seal)

New York & Honduras Rosario Mining Company

Comparative Statement of Net Assets

FOR THE YEARS ENDED DECEMBER 31st AS BELOW

CURRENT ASSETS—	1918	1919	1920	1921	1922	1923	1924	1925	1926
Cash and Cash Items	$361,399	$172,165	$470,377	$283,570	$308,423	$474,620	$146,298	$184,750	94,999
Marketable Securities	323,500	208,800	179,822	408,485	564,611	546,239	1,394,411	1,818,692	1,932,105
Bullion in Transit	387,348	805,137	231,770	1,145	142,270	307,157	261,416	263,334	242,857
Ore in Stopes and Mill Bin	112,126	95,134	120,978	114,217	91,467	88,245	107,375	77,385	77,665
Materials and Supplies	401,343	329,101	403,393	308,464	191,772	210,782	235,033	247,461	286,312
Total Current Assets	$1,585,716	$1,610,337	$1,406,340	$1,115,881	$1,298,543	$1,627,043	$2,144,533	$2,591,622	$2,633.938
Deduct: Current Liabilities	694,372	522,062	199,069	218,387	218,305	205,153	262,560	278,038	123,768
Net Current Assets	$891,344	$1,088,275	$1,207,271	$897,494	$1,080,238	$1,421,890	$1,881,973	$2,313,584	$2,510,170
OTHER ASSETS—									
Accounts Receivable, Investments, Deferred Charges, etc.	237,026	368,378	144,173	178,546	269,179	312,547	222,260	139,276	150,155
PERMANENT—									
‡Mines, Real Estate, Concessions, Buildings, Machinery, etc. (less Allowances for Depreciation)	2,213,070	2,188,829	2,134,275	2,116,892	2,080,317	2,030,539	2,032,953	2,030,457	2,012,815
*Total Net Assets	$3,341,440	$3,645,482	$3,485,719	$3,192,932	$3,429,734	$3,764,976	$4,137,186	$4,483,317	$4,673,140
Increase of Net Current Assets over Preceding Year		$196,931	$118,996	†$309,777	$182,744	$341,652	$460,083	$431,611	$196,586
Increase of Net Current Assets over December 31, 1918		$196,931	$315,927	$6,150	$188,894	$530,546	$990,629	$1,422,240	$1,618,826

* Represented by Capital Stock, Surplus, Reserves for Depletion, Exchange Fluctuation, Contingencies, etc., with no adjustment for increased valuation of mines, etc.

† Decrease.

‡ Not adjusted for increased valuation of mines.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485 92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
1925	1,763,023.16
1926	1,601,429.35
	$37,792,460.67

Distribution to Stockholders

1887 No. 1	$37,500— 2½%	Dividend
1888 Nos. 2 to 5	60,000— 4%	Dividend
1889 Nos. 6 to 14	150,000—10%	Dividend
1891 Nos. 15 to 16	30,000— 2%	Dividend
1892 Nos. 17 to 21	165,000—11%	Dividend
1893 Nos. 22 to 25	150,000—10%	Dividend
1894 No. 26	37,500— 2½%	Dividend
1896 Nos. 27 to 28	30,000— 2%	Dividend
1897 Nos. 29 to 40	180,000—12%	Dividend
1898 Nos. 41 to 48	120,000— 8%	Dividend
1899 Nos. 49 to 60	180,000—12%	Dividend
1900 Nos. 61 to 75	225,000—15%	Dividend
1901 Nos. 76 to 93	300,000—20%	Dividend
1902 Nos. 94 to 100	105,000— 7%	Dividend
1903 No. 101	15,000— 1%	Dividend
1904 Nos. 102 to 108	105,000— 7%	Dividend
1905 Nos. 109 to 121	180,000—12%	Dividend
1906 Nos. 122 to 139	285,000—19%	Dividend
1907 Nos. 140 to 153	210,000—14%	Dividend
1908 Nos. 154 to 165	180,000—12%	Dividend
1909 Nos. 166 to 173	120,000— 8%	Dividend
1910 Nos. 174 to 180	105,000— 7%	Dividend
1911 Nos. 181 to 182	90,000— 6%	Dividend
1912 Nos. 183 to 184	70,000— 3½%	Dividend
1913 Nos. 185 to 188	180,000— 9%	Dividend
1914 Nos. 189 to 193	240,000—12%	Dividend
1915 Nos. 194 to 197	240,000—12%	Dividend
1916 Nos. 198 to 205	400,000—20%	Dividend
1917 Nos. 206 to 211	300,000—15%	Dividend
1917 No. 1	100,000— 5%	Amortization
1918 Nos. 212 to 215	200,000—10%	Dividend
1918 Nos. 2 to 5	200,000—10%	Amortization
1919 Nos. 216 to 219	200,000—10%	Dividend
1919 Nos. 6 to 9	200,000—10%	Amortization
1920 Nos. 220 to 225	320,000—16%	Dividend
1920 Nos. 10 to 11	80,000— 4%	Amortization
1921 No. 226	60,000— 3%	Dividend
1922 Nos. 227 to 229	150,000— 7½%	Dividend
1923 Nos. 230 to 234	250,000—12½%	Dividend
1924 Nos. 235 to 240	350,000—17½%	Dividend
1925 Nos. 241 to 247	350,000—17½%	Dividend
1926 Nos. 248 to 255	400,000—20%	Dividend
Total	$7,350,000	

Dividends 1 to 182, inclusive, were paid on Capital Stock of	$1,500,000.00
Dividends 183 to 255, inclusive, were paid on Capital Stock of	2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of	2,000,000.00

REPORT of the NEW YORK & HONDURAS ROSARIO MINING CO.

1927

NEW YORK

January 1, 1928

OFFICERS 1928-1929

LEWIS L. CLARKE, *President*

H. A. GUESS, *Vice-President*

A. R. GORDON, *Vice-President*

W. C. LANGLEY, *Treasurer*

J. PERLMAN, *Secretary*

BOARD OF DIRECTORS 1928-1929

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY	W. C. LANGLEY
LEWIS L. CLARKE	W. L. SAUNDERS
H. A. GUESS	E. V. SOTO
IRVING HEIDELL	AMBROSE G. TODD
DR. J. RALPH JACOBY	DR. JULIUS J. VALENTINE

P. R. WEILER

EXECUTIVE COMMITTEE 1928-1929

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY	W. L. SAUNDERS
H. A. GUESS	AMBROSE G. TODD

P. R. WEILER

LEWIS L. CLARKE, W. C. LANGLEY } *Ex-Officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company For the year ended December 31st, 1927

Submitted at the
Annual Meeting of the Stockholders
April 4, 1928

New York, April 4, 1928

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

Your company has done a satisfactory business during the year 1927. While it is not possible to report as large a production as during the years immediately preceding, the results are over the 2,000,000 ounce mark in silver, a record which the company has consistently maintained including and since 1923. The production for 1927 was 2,165,225.53 ounces silver and 5584.233 ounces gold, compared with 1926, which was 2,468,911.07 ounces silver and 5561.05 ounces gold. The reduction in the silver production is explained by our General Manager, as follows:

The production of silver in the past year fell somewhat short of expectations. As already explained in other parts of this report, it was due to much of the ore coming from the margins of the principal ore bodies where less constancy in vein width and valuable content resulted in lower tonnage output per man and lower milling grade. Inability to extend the mining of ore over the night shift owing to shortage of labor prevented the drop in grade being made up by production of a larger tonnage. The 1927 silver production, however, should be looked upon with some satisfaction, because though not equal to that of 1926, it must not be forgotten that 1926 was a banner year in the 47 years' operating history of the property.

In appraising the results of last year's business as reflected in our financial statements which I am making a part of this report, it must be borne in mind that although the market price of silver has made a recovery, it has not brought it to a figure comparable with those of the past five years. A single illustration will be sufficient when I compare the realized price of 1926—$.6021 with that of 1927 of $.5662, or a difference of $.0359 on the product of this last year.

Following are the details pertaining to the mine production for the past two years:

	Year 1927	Year 1926	Increase Decrease
Total Sales Value of Gold and Silver Recovered	$1,341,300.06	$1,601,429.35	$260,129.29
Tons of Ore Milled	108,400	109,670	1,270
Ounces of Silver Recovered	2,165,225.536	2,468,911.07	303,685.534
Number of Ounces of Silver Recovered per Ton of Ore	19.9744	22.5122	2.5378
Ounces of Gold Recovered	5,584.233	5,561.057	23.176
Sales Value of Silver Recovered	$1,225,874.06	$1,486,482.34	$260,608.28
Average Sales Value of Silver per Ounce	$ .5662	$ .6021	$ .0359
Average Cost of Silver per Ounce	$ .4029	$ .3528	$ .0501
Average Profit on Silver per Ounce.	$ .1633	$ .2493	$ .0860
Total Sales Value of Gold Recovered	$ 115,426.00	$ 114,947.01	$ 478.99
Value of Gold per Ounce	$ 20.67	$ 20.67	.....
Value of Silver Recovered per Ton of Ore	$ 11.3088	$ 13.5541	$ 2.2453
Average Cost of Silver per Ton of Ore	$ 8.0469	$ 7.9429	$ .1040
Average Profit on Silver Recovered per Ton of Ore	$ 3.2619	$ 5.6112	$ 2.3493
Value of Gold Recovered per Ton of Ore	$ 1.0648	$ 1.0481	$ .0167
Number of Bars of Bullion Shipped from Mine	1,297	1,506	209

Income and Profit and Loss Statement

For the year ended December 31, 1927

Production of Gold and Silver			$1,341,300.06	
Less: Freight and Expenses on Bullion			55,443.02	
Operating Income				$1,285,857.04
Deduct: Operating Expenses				867,447.41
Operating Profit				418,409.63
Deduct: New York Administrative Expenses				64,819.58
Net Profit from Operations				353,590.05
Other Income				138,761.83
				492,351.88
Other Deductions				29,541.27
Net Profit Before Federal Income Tax and Provision for Reserves				462,810.61
Federal Income Tax				23,343.62
Net Profit for Year				439,466.99
Appropriated for Reserves from Earnings—				
Depletion (Based upon valuation of mine at March 1, 1913)			$ 18,762.92	
Fire Insurance			7,070.21	
Transit Insurance			3,570.53	29,403.66
Profit for Year Carried to Surplus				410,063.33
Surplus—				
Surplus, January 1, 1927			1,956,435.63	
Additions—				
Increase during 1927 in market values of securities owned at December 31, 1927	$ 33,263.27			
Sundry Surplus Credits	34,005.03	$ 67,268.30		
Deductions—				
Dividends Paid and Provided	400,000.00			
Depletion (On appreciated mine valuation)	18,762.91			
Sundry Surplus Charges	30,700.62	449,463.53	382,195.23	1,574,240.40
Surplus—December 31, 1927				$1,984,303.73

NOTE—During the year 1927 the United States Government authorized a readjustment of our depletion account due to certain new discoveries. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Entries recording Depletion on the new discoveries will be made in a supplementary memorandum ledger account, wherein is set up the values allowed by the Treasury Department and showing the actual depletion sustained and allowable for each year. These depletion entries are made for income tax purposes only.

Condensed Balance Sheet
December 31, 1927

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion	2,079,985.76	$ 920,014.24	
Plant Buildings, Machinery and Equipment	$1,481,594.48		
Less: Allowance for Depreciation	1,007,882.40	473,712.08	$1,393,726.32
Current—			
Cash		$ 33,023.37	
Call Loan plus Interest (Secured)		80,147.27	
Sundry Debtors		3,667.60	
Bullion at Smelters and in Transit at Market Less Allowance for Expenses		222,502.80	
Broken Ore in Stopes and Mill Bins—At Cost		88,476.87	
Materials and Supplies—At Cost		242,925.06	
U. S. Securities at Market plus Interest		489,595.89	
Other Marketable Securities at Market plus Interest		1,480,437.89	2,640,776.75
Other Assets—			
Sundry Accounts Receivable		$ 14,229.90	
Capital Stock of Other Companies (Nominal Value		1.00	14,230.90
Deferred Charges—			
Prepaid Insurance, Taxes and Expenses			239,306.32
TOTAL ASSETS			$4,288,040.29

LIABILITIES

Current—			
Drafts Payable		$ 23,491.07	
Accounts Payable		53,448.00	
Federal Income and Profits Taxes		40,890.96	117,830.03
Reserves—			
Mine Fire Insurance		$ 63,854.06	
Transit Insurance		21,032.75	
Dividends—Payable January, 1928		100,000.00	
Property Replacement		1,019.72	185,906.53
Capital Stock—			
Authorized and Issued—200,000 shares of a Par Value of $10.00 per share		$2,000,000.00	
Surplus—			
Earned	$1,373,013.74		
Appreciation of Mine Valuation	$1,500,000.00		
Less Depletion Earned	888,710.01	611,289.99	1,984,303.73	3,984,303.73
			$4,288,040.29

The financial position of the Company at the beginning and at the close of the year 1927 based upon Balance Sheets prepared by the auditors at both dates is set forth below in condensed comparative form.

	December 31, 1927	December 31, 1926	Increase Decrease
Current Assets	$2,640,776.75	$2,633,939.06	$ 6,837.69
Current Liabilities	117,830.03	123,768.59	5,938.56
NET CURRENT ASSETS	2,522,946.72	2,510,170.47	12,776.25
Other Assets	14,230.90	9,717.05	4,513.85
Permanent Assets—Less: Depreciation	473,712.08	512,815.54	39,103.46
Mines, Real Estate and Concessions—Less: Depletion of Mines	920,014.24	957,540.07	37,525.83
Deferred Charges	239,306.32	140,438.57	98,867.75
	$4,170,210.26	$4,130,681.70	$39,528.56
Represented by:			
Reserves—Insurance	$ 84,886.81	$ 74,246.07	$10,640.74
Reserve—Dividends Payable	100,000.00	100,000.00	.....
Reserve—Property Replacement	1,019.72	.....	1,019.72
Capital Stock	2,000,000.00	2,000,000.00	.....
Surplus	1,984,303.73	1,956,435.63	27,868.10
	$4,170,210.26	$4,130,681.70	$39,528.56
Ratio of Current Assets to Current Liabilities	22.41 to 1	21.28 to 1	1.13 to 1

Dividends Paid

April, 1927	$100,000.00	
July, 1927	100,000.00	
October, 1927	100,000.00	
January, 1928	100,000.00	
		$400,000.00

Auditor's Certificate

WE HEREBY CERTIFY that we examined the books of account and record of the NEW YORK & HONDURAS ROSARIO MINING COMPANY, NEW YORK CITY, for the year ended December 31, 1927 and, subject to the fact that we did not examine the records at the mine office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at December 31, 1927, and that the related Income and Profit and Loss Statement is correct.

(Signed) ERNST & ERNST.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
1925	1,763,023.16
1926	1,601,429.35
1927	1,341,300.06
	$39,133,760.73

Distribution to Stockholders

1887	No. 1	$37,500— 2½% Dividend
1888	Nos. 2 to 5	60,000— 4% Dividend
1889	Nos. 6 to 14	150,000—10% Dividend
1891	Nos. 15 to 16	30,000— 2% Dividend
1892	Nos. 17 to 21	165,000—11% Dividend
1893	Nos. 22 to 25	150,000—10% Dividend
1894	No. 26	37,500— 2½% Dividend
1896	Nos. 27 to 28	30,000— 2% Dividend
1897	Nos. 29 to 40	180,000—12% Dividend
1898	Nos. 41 to 48	120,000— 8% Dividend
1899	Nos. 49 to 60	180,000—12% Dividend
1900	Nos. 61 to 75	225,000—15% Dividend
1901	Nos. 76 to 93	300,000—20% Dividend
1902	Nos. 94 to 100	105,000— 7% Dividend
1903	No. 101	15,000— 1% Dividend
1904	Nos. 102 to 108	105,000— 7% Dividend
1905	Nos. 109 to 121	180,000—12% Dividend
1906	Nos. 122 to 139	285,000—19% Dividend
1907	Nos. 140 to 153	210,000—14% Dividend
1908	Nos. 154 to 165	180,000—12% Dividend
1909	Nos. 166 to 173	120,000— 8% Dividend
1910	Nos. 174 to 180	105,000— 7% Dividend
1911	Nos. 181 to 182	90,000— 6% Dividend
1912	Nos. 183 to 184	70,000— 3½% Dividend
1913	Nos. 185 to 188	180,000— 9% Dividend
1914	Nos. 189 to 193	240,000—12% Dividend
1915	Nos. 194 to 197	240,000—12% Dividend
1916	Nos. 198 to 205	400,000—20% Dividend
1917	Nos. 206 to 211	300,000—15% Dividend
1917	No. 1	100,000— 5% Amortization
1918	Nos. 212 to 215	200,000—10% Dividend
1918	Nos. 2 to 5	200,000—10% Amortization
1919	Nos. 216 to 219	200,000—10% Dividend
1919	Nos. 6 to 9	200,000—10% Amortization
1920	Nos. 220 to 225	320,000—16% Dividend
1920	Nos. 10 to 11	80,000— 4% Amortization
1921	No. 226	60,000— 3% Dividend
1922	Nos. 227 to 229	150,000— 7½% Dividend
1923	Nos. 230 to 234	250,000—12½% Dividend
1924	Nos. 235 to 240	350,000—17½% Dividend
1925	Nos. 241 to 247	350,000—17½% Dividend
1926	Nos. 248 to 255	400,000—20% Dividend
1927	Nos. 256 to 263	400,000—20% Dividend
	Total	$7,750,000

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 263, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00

Comparative Statement of Net Assets

FOR THE YEARS ENDED DECEMBER 31st AS BELOW

CURRENT ASSETS—	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
Cash and Cash Items	$361,399	$172,165	$470,377	$283,570	$308,423	$474,620	$ 146,298	$ 184,750	$ 94,999	$ 116,838
Marketable Securities	323,500	208,800	179,822	408,485	564,611	546,239	1,394,411	1,818,692	1,932,105	1,970,034
Bullion in Transit	387,348	805,137	231,770	1,145	142,270	307,157	261,416	263,334	242,857	222,503
Ore in Stopes and Mill Bin	112,126	95,134	120,978	114,217	91,467	88,245	107,375	77,385	77,665	88,477
Materials and Supplies	401,343	329,101	403,393	308,464	191,772	210,782	235,033	247,461	286,312	242,925
Total Current Assets	$1,585,716	$1,610,337	$1,406,340	$1,115,881	$1,298,543	$1,627,043	$2,144,533	$2,591,622	$2,633,938	$2,640,777
Deduct: Current Liabilities	694,372	522,062	199,069	218,387	218,305	205,153	262,560	278,038	123,768	117,830
Net Current Assets	$891,344	$1,088,275	$1,207,271	$897,494	$1,080,238	$1,421,890	$1,881,973	$2,313,584	$2,510,170	$2,522,947
OTHER ASSETS—										
Accounts Receivable, Investments, Deferred Charges, etc.	237,026	368,378	144,173	178,546	269,179	312,547	222,260	139,276	150,155	253,536
PERMANENT—										
‡Mines, Real Estate, Concessions, Buildings, Machinery, etc. (less Allowances for Depreciation)	2,213,070	2,188,829	2,134,275	2,116,892	2,080,317	2,030,539	2,032,953	2,030,457	2,012,815	1,973,712
*Total Net Assets	$3,341,440	$3,645,482	$3,485,719	$3,192,932	$3,429,734	$3,764,976	$4,137,186	$4,483,317	$4,673,140	$4,750,195
Increase of Net Current Assets over Preceding Year		$196,931	$118,996	†$309,777	$182,744	$341,652	$460,083	$431,611	$196,586	$12,777
Increase of Net Current Assets over December 31, 1918		$196,931	$315,927	$6,150	$188,894	$530,546	$990,629	$1,422,240	$1,618,826	$1,631,603

* Represented by Capital Stock, Surplus, Reserves for Depletion, Exchange Fluctuation, Contingencies, etc., with no adjustment for increased valuation of mines, etc.

† Decrease.

‡ Not adjusted for increased valuation of mines.

Government of Honduras

We have had many important questions under consideration with the Government of Honduras during the past year, and we wish to extend to that Government and its representatives our thanks for the courtesies that have been extended to us, and our best wishes for the prosperity of the people of Honduras.

Respectfully submitted,

LEWIS L. CLARKE,
President.

Annual Report of the General Manager

San Juancito, Honduras, C. A., January 1, 1928

To the President,
New York & Honduras Rosario Mining Company,
New York, N. Y.

Dear Sir:—

The operations on the Company's property in Honduras during the year 1927 are covered in the following report:

Production

	1927	1926
Dry tons treated	108,400	110,700
Average per ton—Troy ounces silver	21.69	24.70
Average per ton—Troy ounces gold	.0546	.0558
Total Troy ounces silver produced	2,172,753	2,501,542
Total Troy ounces gold produced	5,684	5,829
Ratio of silver to gold	388 : 1	440 : 1
Bars Doré Bullion	1,297	1,506
Bullion fineness, silver	979.49	975.54
Bullion fineness, gold	2.55	2.20

Of the above product, 554.02 ounces silver and 82.821 ounces gold came from custom ore and melted coins. In 1926 18,441 ounces silver and 184.5 ounces gold were similarly obtained.

The decrease in silver production by 310,903 ounces as compared with that of 1926 is ascribed to impoverishment of the upper reaches of some of the principal veins; to decrease in their width; and to inability to open up sections containing better grade ore fast enough to offset the first two conditions. Work in making available better grade ore in quantity is receiving first attention, and it is believed should be sufficiently advanced to effect some improvement in production in the first half of 1928.

Gold production is nearly the same despite the drop in silver production. This is due to heavier output from gold bearing sections, in accordance with plans discussed in previous reports. There is reason to believe that during 1928 the gold production will be even better.

Honduras Operating Costs

Operating Basis:	1927	1926
Dry tons milled	108,400	109,670
Troy ounces silver produced	2,172,198	2,483,101
Troy ounces gold produced	5,601	5,645
Total troy ounces bullion produced	2,177,799	2,488,746
Feet exploration and development driven	18,892.5	16,263.5

	Total Costs		Per Ton		Per Troy Ounce Fine Bullion Produced	
Mine	1927	1926	1927	1926	1927	1926
Labor	$275,121.95	$258,013.12	$2.54	$2.35	$.1263	$.1037
Supplies	164,628.73	155,821.01	1.52	1.42	.0756	.0626
Power	6,664.04	6,698.39	.06	.06	.0031	.0026
Total	$446,414.72	$420,532.52	$4.12	$3.83	$.2050	$.1689
Mill						
Labor	$ 56,029.82	$ 54,131.50	$ .52	$ .49	$.0257	$.0217
Supplies	177,030.95	204,377.56	1.63	1.86	.0813	.0821
Power	9,815.65	11,117.83	.09	.10	.0045	.0045
Totals	$242,876.42	$269,626.89	$2.24	$2.45	$.1115	$.1083
Honduras Administration	$135,029.06	$117,889.29	$1.25	$1.07	$.0620	$.0474
Totals	$824,320.20	$808,048.70	$7.61	$7.35	$.3785	$.3246
Credit value of gold produced	$112,014.92	$112,902.18	$1.03	$1.02	$.0514	$.0453
Net cost of silver	$712,305.28	$695,146.52	$6.58	$6.33	$.3271	$.2793
Cost per troy ounce silver produced	$.3271	$.2793				

The comparative operating basis above shows that while the tonnage mined is about the same, there was a material increase in exploration and development footage as compared with 1926. Such work is a heavy item of expense, and the increase by 2,629 feet or 16 per cent, together with more costly stoping due to less favorable ground, were the principal factors in increasing mining costs in 1927.

There is an increase in Administration costs. This department covers about thirty operations, and the increase is an aggregate of greater expenditures in such items as road repairs, garrison, schools, examination of prospects, etc. Offsetting the increased expense of Mine and Administration is a material decrease in the Milling Department. This is due to fewer mill supplies being used on account of lower silver production and to more efficient use of supplies due to improvements. Therefore, the total Honduras Operating Costs are but $17,158.76 higher than in the year previous.

FINANCIAL

Exchange

	1927	1926
Drafts on Treasurer during the year	$ 624.658.17	$ 547,538.57
Yield in Pesos	1,310,444.09	1,152,986.38
Rate of Exchange, average for the year	209.786%	210.576%
Exchange Earnings on Basis of Prescribed Rate of Exchange of 200%	$ 30,563.87	$ 28,954.62
Lowest Rate of Exchange during year	208.00%	212.00%
Highest Rate of Exchange during year	214.00%	217.00%
Rate of Exchange as of December 31st	210.00%	217.00%

Owing to the demand for Central American silver currency in sections of the country where formerly only gold was used, and to greater competition in selling exchange, there was a drop in the latter part of 1927 in the rate of exchange between silver pesos and American dollars. Indications point to a further downward trend.

THE MINE

Ore Reserves

The ore reserves of each vein are shown in Annex A, location of the calculated reserves of the principal veins also being shown on corresponding maps submitted with this report.

Summary

	Tons of Ore and Waste	Ozs. Ag. Per Ton	Ozs. Au. Per Ton	Total Ozs. Ag.	Total Ozs. Au.
Calculated Ore, at 13 cu. ft.	224,816	21.63	.0486	4,863,865	10,938
Estimated Ore, at 13 cu. ft.	43,000	14.34	.076	616,500	3,280
Estimated Stope filling, at 17 cu. ft.	10,000	10.00	.035	100,000	355
Broken Ore in Stopes, at 21 cu. ft.	18,623	19.31	.053	359,610	987
Total Reserve as of Jan. 1, 1928	296,439	20.04	.053	5,939,975	15,560

Notwithstanding that during 1927 2,350,642 ounces silver and 5,833 ounces gold were mined, the ore reserves as of January 1st, 1928, compared with those of a year ago, show a decrease of only 1,320,025 ounces silver and 1,271 ounces gold. Exploration and development in 1927, therefore, replaced nearly half of the silver and more than three-quarters of the gold mined. The per ton average of this year's reserve is 1.36 ounces silver less than that of

last year's reserve average. This is due to most of the ore opened up during 1927 being of low grade, on account of being found along the lateral and upper extremities of the principal ore bodies.

A large percentage of the calculated ore of better grade in the Esperanza section lies below the Upper 150 and the Zero levels. Up to the present time this ore has not been opened up below these levels to determine its downward extent, actual quantity and per ton value. Therefore, the ore blocks in this section are only an approximation which, however, is considered conservative. The work which is being done to open up the sections where this ore exists is treated in other parts of this report.

Besides the calculated ore in the Salvador Group and the Independencia shown on Annex A, it is estimated that there are around 500,000 tons of ore in prospect.

ORE PRODUCTION

	1927	1926
By Stoping	95,428 tons	96,820 tons
From Development Excavations	11,941 tons	12,413 tons
Stope Filling	1,015 tons	288 tons
Total Delivered to Mill	108,384 tons	109,521 tons
Number of Producing Veins	26	25

Monthly and yearly ore production by veins is shown in Annexes "D" and "E".

The Esperanza section of the mine produced 68% of the ore milled in 1927, as against 71% in 1926. Most of this ore was less conveniently located than was the case in the year previous, as it came from the lateral extremities and highest reaches of the principal Esperanza veins. This is indicated on the working maps of the Salvador, Fortuna and Independencia veins. Furthermore, owing to decrease in width or splitting into stringers of the vein in several places, mining on ore fill had to be stopped and the more expensive and less tons-per-man waste fill method adopted.

In other sections of the mine, as the Santa Gertrudis, where 12,008 tons of ore were obtained, more or less the same conditions prevail.

Excepting the Salvador, none of the other veins in the Esperanza section have been stoped below the Upper 150 level. Work is in progress to make the ore below this level available, and when concluded there is every reason to believe there will be a material reduction in stoping costs. Underground labor supply, so far as the number of men available for the day shift is concerned, was ample. The scarcity of skilled labor, however, continued. The

night shift was increased in the latter part of the year, as it was found impossible to take care of the increased development program and ore production on the day shift alone. Night work underground tends to be less efficient and more costly, and is to be reduced as circumstances permit.

In 1926, 306 day shifts were worked at the mine, with 500 as the average number of men per shift, including all top men. In 1927 there were 309 day shifts with about 515 men per shift, and 230 night shifts with about 40 men per shift.

Exploration, Development and Mining

Summary of Footage Driven

	Drifts	Cross-cuts	Raises	Winzes	Cut-offs	Total
1927	7,484.5	5,785.5	3,536.0	38.0	2,048.5	18,892.5
1926	7,719.5	4,889.0	3,278.5	42.5	334.0	16,263.5

Annex "C" shows distribution of the footage driven, and the maps submitted with this report show in what portion of the vein or section of the mine most of such work was done. These maps also show, at 5 ft. intervals, the vein width and assay results in ounces silver and ounces gold.

Connections

Of the total footage driven, 2,048.5 feet consisted of connections by crosscuts and drifts. The crosscuts were driven to shorten distances between working places, while the drifts parallel and replace heavily timbered working tunnels which it is cheaper to abandon rather than retimber every few years. Thus the Lower 300 Rosario level, which is timbered most of the way and on which water supply for the fire system of the camp depends, has had its most heavily timbered sections replaced by parallel drifts in solid rock. Work of this nature was also done in the Upper 150 West vein drift, which is the main entry into the western section of the Mine and the western slope of the mountain, where all mine timber is obtained. Besides eliminating all upkeep cost in the future, these drifts afford full security against closing in of the tunnel. As branch veins which might have been overlooked in the past would be intersected by these drifts, they serve exploration purposes as well.

The following is a brief resume of the work done during 1927 in the different veins.

Buena Ventura Vein

The only work done in this vein in the past year was 34 ft. of drifting at the Upper 350 level on a stringer between this vein and the Guadalupe. The stringer proved of no commercial value.

There are possibilities for scattered bunches of ore in various sections of the vein, and it is probable that in the coming year stoping will commence on a small body of ore at the Lower 300 ft. level.

Candelaria Group

In the past year almost all driving was confined to raising and cross-cutting to reach the Candelaria at a new level, the Upper 600, through the Socorro workings. The cross-cut off the Socorro should intersect the Guadalupe vein early in 1928, and after about 300 ft. of drifting eastward on the Guadalupe, the Candelaria should be picked up. It is expected that some of the Candelaria ore bodies which were stoped on the Upper 500 level will extend to the Upper 600 ft. level.

Some recovery work was done and a portion of the workings at the Upper 350 ft. level between blocks 33 and 39 entered. Preparations are being made to mine the accessible ore pillars. At the Upper 250 level an ore pillar of good grade was mined which yielded 880 tons.

Capitana Vein

This vein is similar to the Candelaria in that it carries a high percentage of gold. While ore exists at the Upper 350 and Upper 550 levels, it will not pay to mine this unless work is being done at the same time in neighboring veins. There are good prospects of getting ore below the Lower 100 ft. level, and as this section can easily be made accessible from the Lower 300, a cross-cut now 94 ft. long, is being driven to intersect the vein. It is expected that the downward extent of the Lower 100 level ore body will be reached some time late in 1928.

Catalina Vein

Work was resumed in the Catalina in the past year, the Upper 250 heading being driven southward 81½ ft. and 459 tons of ore mined. As soon as the stope from the Upper 250 level reaches the Upper 350, the south heading at the latter is to be driven, and some small ore pillars mined.

Colonia Vein

In the past year this vein produced 1,699 tons of ore as against but 367 tons in the year previous. It all came from the Lower 300 ft. level stopes, again made accessible by driving a drift around caved workings of the Guadalupe vein.

No mining of the ore existing in the floor of the Lower 300 ft. level is being done, this pending extension of the Lower 650 electric haulage to the Colonia ore pass.

There is every reason to believe that an equal if not greater quantity of ore will be mined from this vein in the coming year.

The only development contemplated in 1928 is that required to determine the extent of the ore below the Lower 300 ft. level.

Culebra Vein

The 600 feet of development was principally at the Upper 350 and Upper 500 levels, all of it either on the main or hanging wall vein. This work proved disappointing because outside of two small ore pockets, most of the vein is too low in grade to warrant mining at the present time.

The prospects of the Upper 350 level ore bodies extending down to the Upper 250 level are fair. Accordingly, driving is to be resumed in the Upper 250 south heading. Whether the Upper 150 south heading is to be driven also will depend largely on what the Upper 250 work discloses.

The ore production of 9,630 tons about equals that of the year previous. It is probable this vein will produce about the same amount of ore in 1928.

Guadalupe Vein

The only work done in 1927 was at the Upper 150 level on a stringer. Development and connection consisted of 173½ ft. and ore production 286 tons. The possibility for lateral extent of this stringer will probably not exceed 120 ft., that of the ore actually found being about 80 ft. Mining this ore at the Upper 150 indicates that it may be of better value and more extensive below this level.

Jucuara Vein

No work was done in the vein itself in 1927, but at the Upper 250 Santa Gertrudis level in Block 73-G3 a cross-cut was started to learn if this vein exists some 600 ft. east of the present Upper

150 heading. The approximate length of the cross-cut will be around 450 ft., and before reaching the Jucuara it should intersect a parallel vein in about 300 ft.

A small amount of stoping at the 150 level is planned, as well as sinking a shaft below this level.

Independencia Group

Under this heading are included the Independencia vein and associated veins in its close vicinity which development has proved are branches of it, as for instance the San Blas, Vein No. 3, etc.

Of the 1,840 ft. of development work done in 1927, 1,033½ ft. was in drifts in the eastern extremity of the group. The Independencia in the eastern section enters crushed and faulted ground similar to that in the same direction in the Salvador, and about the same thing happens; that is, the vein splits into stringers, those which are ore bearing lacking continuity or width to be of much commercial importance. At the 150 level a branch stringer parallel and south of the Independencia was driven on, and a small quantity of good grade ore disclosed. At the Upper 250 level it did not prove ore bearing, but a raise from the Upper 150 disclosed that the ore can be expected to extend up to within about 25 ft. of the Upper 250. At the present time the best prospects for ore in this stringer appear to lie below the Upper 150 level.

In its western extremity the Independencia is cut off by a fault on all the levels. At the Upper 250 level some distance was driven on the other side of the fault, but the vein was not picked up again. At the present time a cross-cut is being driven at this level to the north, to see if the vein has shifted in that direction. The fault referred to has about a 45 degree pitch, with the result that the western lateral extent of ore possibilities decreases very appreciably on the upper levels.

The Independencia produced 16,969 tons of ore, or only 831 tons less than in 1926. It was obtained on the four levels and eastern section of the vein, and was not of as high grade as that mined in 1926.

Last October a cross-cut was started for the Independencia at the Zero level. It will be about 750 ft. long, and will intersect the vein at a depth of about 110 ft. below the Upper 150 level. There is every reason to believe that an important quantity of high grade ore will be obtained at the Zero level. The cross-cut should intersect the vein by next March.

What appears to be the Independencia vein was intersected by the Lower 650 Esperanza cross-cut. At this point it is split into numerous stringers, one about a foot in width, but excepting in one or two spots, there are no values of commercial importance. Driving should be done on the vein at this level, as it is quite possible that branch ore shoots from the main ore body at the Upper 150 level may exist at this depth.

The San Blas vein owing to its dip should join the Independencia somewhere below the Zero level. In the past year it produced 1,895 tons of ore, all of which came from the Upper 250 level where most of the development was done. The value of the ore before being mined is above the average grade, but owing to erratic width and broken up character of the vein, that obtained in the past year was probably below average milling grade. During 1928 more stoping is to be done at the Upper 250 level and efforts made to open up the vein at the Upper 350 level.

Northwest Vein

The ore production of 711 tons is about a third of that mined in 1926. It came from stoping and development work at the Lower 100 and Lower 300 levels, Blocks 47 to 49.

On the Lower 100 a sub level is being driven to open up the downward extent of a rich ore body mined at the Zero level. At the Lower 300 the main heading is being driven southeast to get under an ore body stoped at the Lower 200 and above. All this work is in Blocks 47 to 49, inclusive. Driving of the Lower 450 southeast heading will depend entirely on what the work on the level immediately above discloses.

It is expected that in 1928 this vein will be an important producer of good grade ore.

Nueva Vein

The Zero, the Lower 200 and Lower 300 level drifts do not appear to be on the same vein for about the last 350 ft. As on these levels the Nueva was an important producer of high grade gold-silver ore, some work is warranted to try and locate the Nueva vein proper. This work may be started in 1928. No work was done in 1927.

Rosario Vein

298 ft. of development was done at the Upper 350 level in Blocks 32 to 34, inclusive, to open up an isolated body of medium grade ore. This work proved rather disappointing, as most of the ore is of too low grade to warrant mining at the present time. There are possibilities of finding better grade ore in this section, but work was stopped owing to the caving of a portion of the old workings.

Ore production was 2,744 tons, but will probably be less in 1928 as no immediate work is planned for this section of the mine.

San Benito Vein

This vein is in the Esperanza section of the mine. It will average considerably less than a foot in width, but where ore bearing it is of very high grade and in the past year it was an important source for gold. 2,865 tons of ore came from the Upper 150 stope, most of which, at a height of about 100 ft., entered crushed and more or less barren ground. Raises are being driven to learn if this ore continues above the crushed zone.

419 ft. were driven in the southeast and northwest headings. To the northwest the vein splits into stringers, driving in which has as yet disclosed no ore. To the southeast the vein continues with small bunches of very high grade gold ore, but gradually narrows to less than an inch.

The best ore possibilities appear to lie below the Upper 150 level, and the intention is to explore this section of the vein from one of the levels to be driven off the Lower 650 Esperanza raises.

At the present time the downward extent of the vein below the Upper 150 level is being explored by a small winze on the vein. Unless ore is found to extend above the crushed zone at the Upper 250 level, ore production from this vein during 1928 will be much less than in 1927.

Santa Gertrudis Vein

The Santa Gertrudis proved an important source for ore in the past year, 12,008 tons of this being mined against 5,569 in the year previous. Exploration and development was 1,170 ft. or 62 ft. more than in 1926.

The vein was driven on southward at the Zero, the Upper 150, Upper 250 and Upper 350 levels. At the Upper 150 it was found

that the vein continued south of the fault which it was at first thought had cut it off, but on the whole the vein on the other side of this is less well defined and there is an appreciable diminution in value. Driving in all these headings was stopped in the latter part of the year, but is to be resumed at the Zero and Upper 250 levels as soon as stoping operations permit.

Salvador Group

In former reports the Carmen, Fortuna and Salvador veins were treated separately. As exploration of their southern and upper reaches progressed, it showed them to be not independent veins, but rather a closely associated network, with the Salvador as the predominating vein. In the following, therefore, they are treated as the Salvador Group.

The three veins come together on their dip at about the Upper 450 level and above, and on all the levels in their southern strike. Exploration so far has shown that excepting in very few places, they do not cross each other on either dip or strike, but on the other hand merge into one vein which for convenience is called the Salvador. Accordingly, the field for development and the possibility for ore on the other side of this junction is now reduced to one vein. A short distance south of the strike junction the ground becomes crushed and faulted, and in this the vein splits into numerous stringers, those with values generally being too narrow to be of commercial importance. No ore is expected in this section unless the vein or the stringers enter harder and less disturbed ground.

Work at the Upper 550, Upper 650 levels and above shows that while vein width continues, there is a marked drop in value content. On account of this, it became necessary in the past year to stop some of the stopes in the upper reaches of the Salvador and Fortuna, the ore value average having dropped below pay. Only further exploration will show whether this impoverishment is merely an isolated occurrence or is general at this elevation.

A number of branch or parallel veins and stringers were encountered while developing the main veins, and last year there was opportunity to drive on some of these. At the Upper 350 level and above an important quantity of medium grade ore was found in what is designated as Salvador Branch No. 1. The Upper 800 Independencia surface cross-cut is being extended to intersect this vein. On the Upper 350 level also, but further to the west, some very good grade ore is being opened up in another branch off the Salvador. The present direction of these two branch veins indicates that they will merge into the main Salvador again.

What are believed to be the Carmen and Salvador were intersected by the Lower 650 Esperanza cross-cut. The Fortuna was not intersected due partly to its junction with the Salvador lying, at this elevation, northwest of the cross-cut, and partly to the fact that this vein is very short and of no definite strike. No ore was encountered in these veins at this depth, and exploration of the Rosario and other veins at the same depth has shown that excepting small isolated ore shoots, the large ore bearing horizon lies several hundred feet higher. However, driving on the Carmen, Salvador as well as several other veins at the Lower 650 Esperanza level should by all means be done, as it is very possible shoots of ore from the large bodies at the Upper 150 may continue down to the Lower 650.

Whilst in the southeastern extremity of the main vein, the Salvador, the ground is crushed and faulted, such is not the case to the northwest. Here the ground is very hard and less faulted, but the Salvador has narrowed down to a 2 or 3 inch stringer on all the levels. This stringer, however, is ore bearing and accordingly driving is being done at the Upper 350 level on the chance of its widening to mining width.

During 1927 exploration and development in the Salvador Group amounted to 5,119.5 ft. and ore production 50,844 tons, compared with 3,839 ft. and 57,516 tons respectively in 1926.

South San Miguel Group

The production of 4,529 tons of ore and 693 ft. of development is very nearly the same as in 1926. About two-thirds of the ore mined and development driven was in the branch vein at the Upper 350 level. The indications are that an important quantity of medium grade ore will be obtained from the branch vein and this is to be explored at the Upper 250 level, provided the ore already found at the Upper 350 proves sufficiently extensive. It is desirable to explore the South San Miguel vein itself further to the southeast, but it was impossible to start this work in the past year.

In view of the ore indications in the branch vein, the ore reserve has been decreased by only 1,770 tons.

San Luis Vein

This vein was intersected by the Upper 150 Esperanza cross-cut and exists between the Independencia and San Benito veins.

It was described in detail in last year's report. No development was done in 1927, but 500 tons of ore were obtained. As in the case of the San Benito, the San Luis enters a crushed and faulted zone a short distance above the Upper 150 level. No work has yet been done to see if it exists on the other side of this zone, but if there is an opportunity in 1928 it will be started.

San Vicente Vein

The strike of the San Vicente vein being more or less in the direction required to make connection at the Upper 600 level between the Socorro and Guadalupe, it was thought just as well to drive on the San Vicente part of the way and explore it. The 108 ft. driven disclosed no ore having any present value.

Santa Fe Vein

Excepting a short cross-cut in the east heading to see if the vein could be picked up again, no other work was done in 1927. Outside of one or two spots, the vein is practically barren. When the San Benito is intersected on the lower levels, it would then pay to cross-cut to the Santa Fe to see whether it is ore bearing at greater depth.

Socorro Vein

The 273½ ft. of driving was mostly for the purpose of making connection for the Upper 600 Socorro-Guadalupe-Candelaria level. In the course of this work some ore pillars were stoped, yielding 758 tons. Probably about the same amount of ore will be obtained from this section of the vein in 1928.

Southwest Vein

The only work done in the Southwest during 1927 was at the Upper 350 level off the Santa Gertrudis where 66 ft. of driving disclosed nothing of importance. To avoid completely re-timbering a stoped section of the drift at the Upper 150 level used for electric haulage, a parallel drift was run in the footwall a distance of 314½ ft. A permanent opening for electric haulage, drainage and general access to the western slope of the mountain is now assured through this section at no future expense for upkeep.

If conditions permit, the ore below the Zero level will be mined during the coming year.

Termopilas Vein

The 281 ft. of development was at and above the Upper 300 level in an effort to locate the portion of the vein where mining of high grade ore was done in the past on the surface. The vein seems to be cut off at the Upper 300 ft. level, but as it exists at the surface it should be picked up again. A large flow of water was struck which caused all work to be stopped until it diminishes. The 91 tons of ore came from a small stope at the Upper 300 ft. level.

Veins Not Worked

Veins on which no work was done in 1927 are: Concepcion, Carmen, Crisanta, Esperanza, Jucuara, North, Nueva, San Joaquin, San Miguel North, West.

Upper 150 Esperanza Cross-Cut

In last year's report it was stated that this cross-cut had entered what probably is a rhyolitic shale formation in which no veins are looked for. It has been decided to stop driving this cross-cut and start one having more or less the same direction off the southeastern extremity of the Upper 150 Salvador vein. This new cross-cut which lies about 1,700 ft. east of the Esperanza cross-cut, is underneath and will follow more or less the ridge of the mountain range. The rock is about the same as that in which veins occur, and should it become harder and less disturbed, the possibilities for ore would be considered good. As it is an exploration project into very extensive and unknown territory, driving it is to be given first importance.

Lower 650 Esperanza Cross-Cut

The advance made in this cross-cut during 1927 was 1,207 ft. Driving was stopped in June when the objective, the territory immediately south of the Independencia vein, was reached. The cross-cut starts at the Rosario vein and is now 4,485.5 ft. long.

Besides the Carmen, Salvador and Independencia, several other veins and stringers were intersected. From what the Rosario and other thoroughly explored veins on this level indicate, there was no reason to expect that this cross-cut would encounter commercial ore, excepting perhaps small isolated bodies. Drifting on this level

under existing ore bodies at the Upper 150 level in the Carmen, Salvador and Independencia is fully warranted, on the possibility of encountering deep-seated ore shoots. Besides these veins, there are several others intersected by this cross-cut which fully warrant exploration.

Three vertical raises, 50 ft. apart, are being driven to connect with the Upper 150 Esperanza cross-cut, 770 ft. vertically above. They are located between the Salvador and Independencia veins, one raise to be for ore, another for waste and the third to serve as a ladder, pipe and hoist way. Cross-cuts are to be run from these raises to the Salvador and Independencia at about 130 ft. intervals, and on the levels thus established, these two veins and others in the vicinity are to be developed. As with the exception of the Salvador (which has been mined down to the Zero level) veins of this section have not been touched below the Upper 150 level, a large tonnage of ore is expected. There is every indication that it should be mined cheaper than is the ore now being obtained from the Esperanza section several hundred feet above the Upper 150 level, as the Lower 650 cross-cut and the three centrally located raises assure easier access for men and supplies, natural ventilation, dry mining and a shorter haul to the mill by about 1,200 ft.

Other Esperanza Cross-Cuts

Driving of the Upper 350 Esperanza cross-cut between the Salvador and Independencia veins was concluded in the latter part of the year. This cross-cut provides much needed ventilation for the upper Salvador and Fortuna workings, and will facilitate the handling of mine timber. In the coming year some work is to be done on one or two promising stringers intersected by it.

Upper 150 *West Cross-Cut*

This cross-cut is off the Southwest vein and commences in Block 71. Its object is to intersect any veins branching off the Southwest vein and explore the territory between this and the South San Miguel. Any deep-seated veins cropping on the western slope of the mountain in the Quebrada Honda section should be intersected by this cross-cut.

In the past year this cross-cut was advanced 315.5 ft. making its total length now 558 ft. Driving it was stopped the latter part of the year, pending the completion of more important work.

Porvenir Adit Cross-Cut

This cross-cut starts from the surface at the Upper 150 or Peña Blanca level. Its object is to explore territory in which veins are believed to exist and shorten the distance from the surface into the Esperanza section of the mine by approximately 1,700 ft. This adit was started in 1924 at another location, but after 186 ft. were driven it had to be abandoned due to shifting of the ground. The present adit starts in an undisturbed portion of the mountain and is in solid rock. Its approximate length will be 2,500 ft.

MINE EQUIPMENT

Air Compressors

Equipment consists of two Ingersoll-Rand P.R.E. Type remodeled compressors of 2,120 cubic feet free air per minute capacity each, and each direct connected to a 415 H.P. induction motor; and one Ingersoll-Rand Imperial Type 950 cubic feet per minute capacity compressor direct connected to a 175 H.P. Synchronous Motor.

All repairs to the compressor plant and building are now concluded. In the past year the compressors rendered very satisfactory service and are in shape to do so for a number of years.

Rock Drills and Steel Sharpening

Standardization of drill steel to two sizes has simplified its handling underground and in the shop.

The bits on the drill steel have generally not been entirely satisfactory and this is laid mostly to difficulty in obtaining a uniform heat for forging and tempering in an open charcoal forge or furnace. To remedy this a charcoal gas producer, gas furnace and a pyrometer have been ordered, and it is expected that, with heat control at whatever point found most advantageous, a more satisfactory drill bit should result.

When much of the drilling speed depends upon the drill bit and from 1,200 to 1,500 of these are used here daily, the importance of a properly forged and tempered bit will be realized. It is also believed that use of the gas producer will result in an appreciable saving in charcoal.

More rock drills per day were in operation during 1927 than ever before, the upkeep cost per drill being lower than in 1926

despite the drill equipment being older and there being but few replacements by new drills. During the year twelve new drills were purchased for addition to and replacement of existing equipment.

Electric Haulage

The Upper 150 level electric haulage rendered more satisfactory service than in 1926, owing mostly to special supervision underground and better repair service. The Lower 650 electric haulage service was satisfactory.

As soon as the raises which are to serve as ore and waste passes between the Lower 650 and Upper 150 levels are completed, traffic over the Upper 150 electric haulage will be greatly reduced. When the Upper 150 Porvenir Adit tunnel connects with the Esperanza section, the haulage of waste from there to the surface will be reduced by approximately 1,700 ft.

Track replacement was quite heavy, particularly at the Lower 650 level where also 4,300 ft. of temporary track was laid in the Esperanza cross-cut. Equipment of these two electric haulage systems is as follows:

	Upper 150 Level	Lower 150 Level
Track, 24 gauge, 35 lb. rails	30,000	12,000
Locomotives, trolley type, 250 volts, D. C...	2 5-ton, 2 6½-ton	2 7-ton
No. of cars, 25 cu. ft. doorless	82	56

Automobile Road

This road connects the Lower 650 level with the Upper 150 level via the camp. The difference in elevation between the two levels is 770 feet, and length of the road about three miles. Hauling by auto truck commenced in February, and the advantage of having this better means of communication became manifest at once.

Pipe Lines

The 6 inch branch pipe line serving the Esperanza section of the mine where about 70 percent of all compressed air is used, is 4,600 ft. long and too small, as at peak low periods there is an excessive drop in pressure between the compressors and the drills. Replacing part of it by a pipe of larger diameter through the Porvenir Adit cross-cut is being considered, and as about 1,700 ft. less pipe will be required, this quantity of 6 inch pipe will become available elsewhere.

THE MILL

Tonnage Crushed

	1927	1926
Total wet tons received	122,178.93	123,269.
Average per cent moisture	11.284	10.8
Total dry tons milled	108,400.00	110,700.
Average tons per day milled (365 days)	297	303
Average tons per day milled, full running time (317.273 days)	342	...
Average tons per day milled, full running time (303.706 days)	...	364
Average tons per day milled per 1850 lbs. stamp	17.1	18.2
Number of 1850 lb. stamp	20	20
Total tons treated by present mill to December 31, 1927	1,587,808	

Recovery

	1927	1926
Average ounces silver received per ton	21.690	24.698
Total ounces silver received	2,351,196	2,732,069
Average ounces silver recovered per ton	20.039	22.649
Total ounces silver recovered	2,172,753	2,501,542
Average silver recovery, per cent	92.39	91.70
Average ounces gold received per ton	.0546	.0558
Total ounces gold received	5,918	6,177
Average ounces Gold recovered per ton	.0516	.0528
Total ounces gold recovered	5,684	5,830
Average gold recovery, per cent	94.51	94.62

Supplies Used

	1927	1926	1927	1926
	Per ton of Ore Crushed		Per Oz. Fine Bul'n Produced	
	Tonnage		Grade of Ore	
	108,400	109,670	Ag. 21.690	Ag. 24.698
			Au. .0546	Au. .0558
Cyanide (100% KCN)	4.2627 lbs.	4.947 lbs.	.21218 lbs.	.21916 lbs.
Zinc Dust	.985 "	1.052 "	.04902059 "	.0465904 "
Muriatic Acid	.049 "	.053 "	.0024502 "	.0023382 "
Lime (100%)	12.275 "	12.918 "	.6110628 "	.5965400 "
Borax	.028 "	.038 "	.0014005 "	.0016967 "
Soda	.013 "	.015 "	.00065203 "	.0006464 "
Fuel Oil	.040 gals.	.045 gals.	.0019827 gals.	.0020138 gals.
Artificial Pebbles	43.262 lbs.	38.692 lbs.	2.153642 lbs.	1.7142426 lbs.
Foreign Pebbles	1.832 "	2.0939 "	.091198 "	.0927691 "
Sulphur	.305 "	....	.0151767 "	....

ORE ANALYSIS

	1927	1926	1925
Silica (S1,02)	73,63%	75.61%	72.98%
Alumina (A12,03)	11.17%	3.94%	3.72%
Iron (Metallic)	2.96%	3.47%	3.12%
Manganese	0.74%	0.97%	0.72%
Lime (CaO)	0.57%	0.57%	0.60%
Magnesia (MgO)	0.77%	1.08%	1.37%
Zinc	0.46%	0.87%	1.38%
Antimony	0.06%	0.016%	Trace
Arsenic	0.03%	0.01%	Trace
Lead	0.22%	0.17%	0.19%
Sulphur	1.12%	1.56%	1.33%

Recovery

The silver recovery in 1927 was 92.39% or .69% better than in 1926, and establishes a new record. It can be laid to cleaner solutions, made possible by the cyanide recovery process, to a slightly longer agitation period and to more continuous power supply.

There is reason to believe that an equal or better recovery can be obtained in 1928. The economic limit on the present tonnage milling basis seems to be about 92.75%, unless two agitation tanks are added, when probably it could be improved from .3 to ½%.

Recovery Detail

	1927				1926			
	Hrs.	Min.	Ag.%	Au.%	Hrs.	Min.	Ag.%	Au.%
Extraction by Crushing Solution	9	00	33.85	78.39	9	00	34.45	74.19
Extraction by Agitation.	87	30	58.78	16.30	85	35	57.25	20.25
Extraction in Slimes Presses	1	05	.22	.36	1	05	.46	.54
	97	35	92.85	95.05	95	40	92.16	94.98
Less Dissolved Value Loss			.46	.54			.46	.36
Recovery			92.39	94.51			91.71	94.62
Percent Sand not passing 150 mesh		19.25				2176		

Cyanide Recovery Process

This process, installed in 1926, operated continuously in 1927 and has so far effected a desirable economy. A heavy item of expense is sulphur, which has to be imported from the United States. The possibility of obtaining sulphur from pyrite concentrated either from the ore or the mill circuit is being investigated. As yet, no cheap means of doing this has been found.

There is reason to believe that the cyanide recovery process will do even better in 1928, due partly to greater familiarity with it and to some minor adjustments and improvements.

POWER

Rainfall	1927	1926	1925
Total Rain, Inches	61.43	48.78	55.61
Number Rain Days	197	134	200
Greatest Monthly Rainfall	10.54 (June)	10.69 (Sept.)	11.15 (Sept.)
Lowest Monthly Rainfall	0.58 (Feb.)	.09 (Apr.)	0.30 (Feb.)
Greatest Single Rainfall	2.77 (Oct.)	1.53 (Aug.)	2.46 (June)

HYDRO-ELECTRIC PLANTS

San Juancito Plant

Static Head ..... 1,357 feet.
Pipe Line ..... 4,739 feet of 20", 17" and 14" pipe.
Equipment ..... 2—450 KVA, 6,600 volts, 60 cycles, A. C. Generators, each coupled directly to 600 H. P. Pelton wheel.
Flume Lines ... The Escobales and Aguacatal; built of wood, total length, 17,000 feet.

Guadalupe Plant

Static Head ..... 502 feet.
Pipe Line ..... 2,350 feet of 20" pipe.
Equipment ..... 2—350 KVA, 6,600 volts, 60 cycles, A. C. Generators, each directly connected to a 450 H. P. Pelton wheel.
Flume Lines ... The Guadalupe, 6,000 feet in length, of wood.

POWER DISTRIBUTION

	1927		1926	
	Kilowatt Hours	K.W.Hours Per Ton	Kilowatt Hours	K.W.Hours Per Ton
Mine Power	2,512,530	23.178	2,004,810	18.940
Electric Haulage	258,000	2.380	337,550	3.188
Mine Lights	18,000	.166	18,000	.170
Mill Power	3,849,470	35.512	3,716,990	35.116
Mill Lights	24,000	.221	24,000	.227
Surface Lights	24,000	.222	24,000	.226
Surface Power	83,000	.766	120,000	1.134
Machine Shop	24,000	.221	24,000	.227
Laboratory	6,000	.055	6,000	.057
Totals	6,799,000	62.721	6,275,350	59.285

Power Production by

San Juancito Plant	62.52%	61.6%
Guadalupe Plant	37.48%	38.4%

COST OF POWER PRODUCTION

	1927			1926		
	Amount	Per Ton	K.W.Hr.	Amount	Per Ton	K.W.Hr
Labor	$13,074.51	.12061	.001923	$14,313.79	.13052	.002267
Supplies	3,188.55	.02942	.000469	3,934.06	.03587	.000623
Total	$16,263.06	.15003	.002392	$18,247.85	.16639	.002890

Based on Horsepower Generated

	1927	1926
Horsepower Hours	9,113,941	8,462,882
Cost per Horsepower Hour	$ 0.001785	$ 0.00216
Cost per Horsepower Year	$ 15.6366	$ 18.9216
Cost per Horsepower Year, Decrease	$ 3.2850	

Rainfall

The greater rainfall in 1927 as well as its better distribution shortened the dry season and made power more continuous. Due mostly to this the power output in 1927 was 523,650 kilowatt hours greater.

San Juancito Power Plant

The new equipment in the San Juancito Power Plant is giving very satisfactory results and, together with the reservoir, this plant's total capacity, and efficiency per cubic foot of water used, has been increased materially. No replacements will be required for many years, but the penstock needs scraping and painting.

Guadalupe Plant

As mentioned in other reports, the present Guadalupe penstock is in very bad condition, having already caused two shut downs, and the water wheel equipment from the standpoint of capacity and efficiency is obsolete. A new penstock of larger diameter and water wheels of latest type were ordered and installation will commence in the early part of 1928.

General

When the Guadalupe Plant is remodeled the combined capacity of this and the San Juancito plant, in the wet season, will not only take care of present power needs, but permit addition of machinery to mine or mill.

Using the Lower 650 level drainage water for power through the San Juancito plant by pumping it about 10 feet into a flume which conveys it to the Aguacatal Dam has proved of very material aid, particularly in the dry season.

The matter of using steel transmission poles to replace the wooden ones which are a constant source of maintenance expense has been looked into. No decision has yet been made, but possibly steel poles may be ordered for one section of the transmission line.

All flume lines serving the two power plants are of wood, in use many years and an increasing source of expense. Not only this, but frequently it is necessary to cut off the water to effect repairs, which causes power shortage and consequent interruption to operations. Replacement of several sections is very necessary, and in view of the present cost of local lumber consideration will be given to the purchase of metal flumes.

OTHER DEPARTMENTS

Mechanical Department

This department was able to take care of all mechanical repairs and replacements promptly throughout the year. A greater variety and tonnage of castings were turned out by the foundry than in the year previous, a number of expensive wearing parts for the Mill and other departments being produced at but a fraction of their imported cost.

Medical Department

	1927	1926
Cost of maintenance	$ 5,855.25	$ 6,256.40
Total consultations, examinations and treatments	9,177	11,127

Assay Office and Laboratory

	1927	1926
Total number of assays run	25,180	24,747
Average number of assays per day	69	75
Total cost	$ 5,956.17	$ 6,019.37
Cost per assay	$ 0.24	$ 0.25

Hotel

	1927	1926
Total number of meals served	29,629	30,644
Total cost	$16,548.83	$16,415.16
Cost per meal	0.56	$ 0.535

Roads

	1927	1926
Total maintenance	$ 7,842.47	$ 3,433.51
Increase	$ 3,408.96	.....

Schools

Average daily attendance during year:	1927	1926
Boys' School	122	116
Girls' School	127	114
Total expense	$ 8,783.70	$ 7,159.04

Police and Garrison

	1927	1926
Total maintenance expense	$ 9,543.59	$ 8,064.30
Increase	$ 1,479.29	.....

Agencies

	1927	1926
Total expense	$ 4,351.85	$ 3,662.73
Increase	$ 689.12	.....

EXPANSION

An exploration engineer was kept in the field during a portion of the year and several properties were examined. None of these merited having any work done upon them. The following properties were worked in 1927:

Sabana Grande Honduras Mining Company

The following is the essential information covering operations on this property in 1927:

Tons Ore Milled 3,966.14
Average Grade Ore ..... 35.39 Oz. Silver, .248 Oz. Gold
Product shipped:

	Tons	Oz. Ag. per Ton	Oz. Au. per Ton	Total Oz. Ag.	Total Oz. Au.
Ore	76.691	793.701	5.75	60,869.73	441.012
Concentrates	224.251	554.77	3.791	124,408.20	850.222
				185,377.93	1,291.234
Recovery			Silver	88.62%, Gold	86.197%

The only work at present consists in opening up remaining pillars of ore in the San Marcos vein.

Aurora, San Martin, etc. (Santa Lucia District)

Work during 1927 was confined almost entirely to the La Asuncion and El Cristo zones, the latter a recent acquirement by purchase. This work consisted in recovering 906 feet of old workings on the San Martin, La Zopilotera and El Cristo veins and doing 310 feet of development on the La Zopilotera. The San Martin and La Zopilotera are credited with an appreciable production forty or more years ago, and there are surface stopes which would confirm this. The only prospect showing any promise so far is the La Zopilotera. A small ore body is being explored by shaft and raise and averages about 2.3 feet in width, 36 ounces of silver and .06 ounces gold. The raise has penetrated the surface stopes. In the shaft, which is at present 45 feet deep, the ore continues about the same in width and value as in the level and raise. This ore body alone, even if more extensive, would not warrant installation of even a small mill, but work is being continued in the hope that more or less similar ore bodies will be found in the San Martin and other veins in the close vicinity, which collectively would warrant a mill. An assay map showing the workings of the La Zopilotera vein is submitted with this report.

The expenditure on this property during 1927 was $6,769.19.

Santa Rita

This is a prospect located in the Guazucarán mining district and on which a two year option was taken in the early part of the year. Work is being done on two veins from three to five feet in width, to determine if the occasional values along the outcrop develop into an ore body at depth. 1,105 ft. were driven during 1927, and expenditures were $4,977.25.

Moloncosa and Moramulca

No work was done on these two properties during 1927. The expenditure of $321.55 represents the cost of a watchman on the Moramulca.

Conclusion

The production of silver in the past year fell somewhat short of expectations. As already explained in other parts of this report, it was due to much of the ore coming from the margins of the principal ore bodies where less constancy in vein width and valuable content resulted in lower tonnage output per man and lower milling grade. Inability to extend the mining of ore over the night shift owing to shortage of labor prevented the drop in grade being made up by production of a larger tonnage. The 1927 silver production, however, should be looked upon with some satisfaction, because though not equal to that of 1926, it must not be forgotten that 1926 was a banner year in the 47 years' operating history of the property.

The ore reserves are slightly lower in grade than those reported a year ago, which is mainly due to the ore found in 1927 being of low grade. Some important good grade tonnages of the reserves cannot be mined in any quantity until opened up further, and this is particularly true in the Esperanza section. Work to make such ore available is receiving first attention.

No new veins having large ore possibilities were discovered in 1927. But there are a number of veins and stringers intersected by the several Esperanza cross-cuts in past years which are well worth exploration, and in 1928 it is planned to start work on as many as possible.

The full support and confidence received from you, the officers and gentlemen of the Board, is sincerely appreciated. If any credit be given for what has been accomplished in the year past, this should go to the Staff, whose faithful service under all circumstances is to be commended.

Respectfully submitted,

A. R. GORDON,
General Manager.

Annex "A"

Summary of Calculated Ore Reserves
(At 13 cu. ft. per ton)

VEINS	Av. Width Ft.	Per Cent Waste	Tons of Ore & Waste	Ozs. Ag. per Ton	Ozs. Au, per Ton	Total Ozs. Ag.	Total Ozs. Au.
Carmen	1.8	50	14,500	30	.04	435,000	580
Culebra	1.7	35	20,490	16	.05	327,840	1,024
Fortuna	1.8	40	21,624	16	.04	345,984	865
Independencia Group	2.0	40	39,853	28	.07	1,115,884	2,790
Salvador	2.2	40	72,579	23	.03	1,669,317	2,177
Santa Gertrudis	1.0	70	8,470	22	.03	186,340	254
San Joaquin	1.0	60	9,500	15	.12	142,500	1,140
North San Miguel	1.6	35	4,800	15	.06	72,000	288
South San Miguel Group	1.4	40	25,000	17	.06	425,000	1,500
Southwest	1.5	40	8,000	18	.04	144,000	320
Totals			224,816	21.63	.0486	4,863,865	10,938

Summary of Estimated Ore Reserves
(At 13 cu. ft. per ton)

Buenaventura	2,000	12	.06	24,000	120
Candelaria Group	5,000	12	.06	60,000	300
Capitana	3,000	10	.13	30,000	390
Catalina	3,000	14	.05	42,000	150
Colonia	4,000	14	.07	56,000	280
Esperanza	1,500	15	.05	22,500	75
Guadalupe	1,000	12	.03	12,000	30
Jucuara	2,000	12	.05	24,000	100
North	1,000	14	.05	14,000	50
Northwest	4,000	14	.05	56,000	200
Nueva	1,500	12	.05	18,000	75
Porvenir	2,000	13	.05	26,000	100
Rosario	5,000	12	.06	60,000	300
San Benito	3,000	30	.30	90,000	900
San Luis	1,000	28	.05	28,000	50
Socorro	2,000	14	.05	28,000	100
West	2,000	13	.03	26,000	60
Totals	43,000	14.34	.076	616,500	3,280

Summary of Estimated Stope Filling
(At 17 cu. ft. per ton)

Candelaria	3,000	10	.04	30,000	120
Guadalupe	2,000	10	.03	20,000	60
Rosario	2,500	10	.04	25,000	100
West	1,500	10	.03	15,000	45
Buenaventura	1,000	10	.03	10,000	30
Totals	10,000	10	.035	100,000	355

Summary of Broken Ore in Stopes
(At 21 cu. ft. per ton)

Total	18,623	19.31	.053	359,610	987

Total Summary

Calculated Ore	224,816	21.63	.0486	4,863,865	10,938
Estimated Ore	43,000	14.34	.076	616,500	3,280
Estimated Stope Filling	10,000	10.00	.035	100,000	355
Broken Ore in Stopes	18,623	19.31	.053	359,610	987
Totals	296,439	20.04	.053	5,939,975	15,560

296,439 tons of Ore averaging at Mill. { Silver 20.04 ozs. / Gold .053 ozs.

Annex "B"
BROKEN ORE IN STOPES
(At 21 cu. ft. per ton)
Total by Veins

VEINS	TONS
Buena Ventura	250
Candelaria Group	1,260
Colonia	700
Culebra	350
Fortuna	5,413
Independencia Group	1,040
Northwest	120
Rosario	1,904
Salvador Group	6,816
Santa Gertrudis	270
Socorro	120
South San Miguel Group	380
Total	18,623

Value per ton: Ounces silver .. 19.31)
Value per ton: Ounces gold .... .053) Average of ore milled during last 6 months of 1927.

Annex "C"

Exploration and Development Footage for the Year 1927

Location	Drifts	Cross-cuts	Raises	Winzes	Cut-Offs & Connections	Total Ft. Exclusive Cut-Offs & Connections
Buena Ventura	10.0	24.0	...	...	225.5	34.0
Candelaria	65.5	...	18.0	...	...	83.5
Capitana	6.0	94.0	...	...	...	100.0
Carmen	2.5	66.0	31.5	...	226.0	100.0
Catalina	81.5	...	...	...	...	81.5
Colonia	...	...	...	...	77.5	...
Culebra	380.5	...	219.5	...	...	600.0
Esperanza (Main Crosscut—						
U-150	...	4.0	...	...	...	4.0
U-250	...	190.5	...	...	...	190.5
U-350	...	620.5	...	...	...	620.5
Zero	...	597.5	...	...	...	597.5
L-400	...	35.0	...	...	...	35.0
L-500	...	186.0	...	...	...	186.0
L-650	...	1,207.0	850.5	...	...	2,057.5
Fortuna	1,092.5	182.0	161.5	...	...	1,436.0
Guadalupe	75.0	...	28.5	...	70.0	103.5
Independencia	1,033.5	383.5	399.0	24.0	...	1,840.0
Northwest	120.0	76.0	52.0	...	...	248.0
Porvenir Group	104.5	232.5	208.0	...	...	545.0
Rosario	91.0	95.5	111.5	...	833.0	298.0
Salvador	2,050.0	647.5	852.0	...	...	3,549.5
Salvador U-150 So. Cross-cut	...	34.0	...	...	...	34.0
San Benito	419.0	33.5	64.0	14.0	...	530.5
San Blas	323.5	101.0	87.0	...	254.5	511.5
Santa Fé	...	28.0	...	...	...	28.0
Santa Gertrudis	832.5	163.0	174.5	...	...	1,170.0
San Joaquin	...	95.0	...	...	...	95.0
San Vicente	108.0	...	...	...	...	108.0
Socorro	29.0	144.5	100.0	...	...	273.5
South San Miguel	558.5	23.0	111.5	...	...	693.0
Southwest	52.5	13.5	...	...	314.5	66.0
Termópilas	21.5	193.0	67.0	...	...	281.5
West	27.5	...	...	...	47.5	27.5
West Cross-cut	...	315.5	...	...	...	315.5
Totals	7,484.5	5,785.5	3,536.0	38.0	2,048.5	16,844.0
Cut-Offs and Connections	...	...	...	...	...	2,048.5
GRAND TOTAL	...	...	...	...	...	18,892.5

Annex "D" ORE PRODUCTION—1927 (Dry Tons)

From Stoping Operations—	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Candelaria Group	....	....	122	132	140	91	75	143	158	19	....	....	880
Capitana	24	....	....	....	....	....	....	....	....	....	....	....	24
Catalina	62	269	4	....	....	....	....	....	....	....	33	50	418
Colonia	....	....	....	....	....	104	265	144	239	298	393	256	1,699
Culebra	535	1,019	1,603	1,547	1,049	692	671	691	8	150	624	454	9,043
Fortuna	871	1,813	688	641	1,064	908	1,258	1,250	1,825	2,632	2,233	1,683	16,866
Guadalupe	....	....	....	....	....	....	....	38	....	49	58	38	183
Independencia & Veta No. 3	1,400	879	1,101	837	566	1,039	1,443	1,990	1,533	1,699	1,620	1,198	15,305
Northwest	89	95	218	232	....	....	....	....	....	....	....	....	634
Porvenir (No. 4 included)	....	....	....	....	....	....	....	....	....	72	....	86	158
Rosario	469	372	689	313	264	71	93	52	228	167	26	....	2,744
Salvador, Veta No. 1 & Veta No. 2	4,044	2,211	2,826	2,638	1,526	2,875	1,942	1,260	1,990	2,153	1,394	2,739	27,598
San Benito	280	207	170	200	281	244	206	311	183	234	153	155	2,624
San Blas	....	....	....	41	81	55	195	128	268	224	125	164	1,281
Santa Gertrudis	357	293	559	684	838	570	764	1,248	2,176	1,102	1,784	477	10,852
San Luis	45	18	71	61	112	105	88	....	....	....	....	....	500
Socorro	16	130	199	106	153	18	....	....	9	66	17	44	758
South San Miguel	323	302	326	380	303	204	149	165	184	397	250	787	3,770
Southwest	....	....	....	....	....	....	....	....	....	....	....	....	....
Termópilas	50	41	....	....	....	....	....	....	....	....	....	....	91
Totals	8,565	7,649	8,576	7,812	6,377	6,976	7,149	7,420	8,801	9,262	8,710	8,131	95,428

From Development Excavations—													
Candelaria Group	....	....	....	....	....	....	....	....	....	....	....	....	....
Capitana	....	....	....	....	....	....	....	....	....	....	....	....	....
Catalina	....	....	....	....	....	....	....	....	....	41	....	....	41
Colonia	....	....	....	....	....	....	....	....	....	....	....	....	....
Culebra	....	....	....	....	121	191	42	14	4	9	96	110	587
Fortuna	338	387	311	54	52	109	110	121	241	223	108	101	2,155
Guadalupe	....	....	....	....	....	....	103	....	....	....	....	....	103
Independencia & Veta No. 3	45	97	29	141	161	375	482	204	47	41	....	42	1,664
Northwest	....	....	....	....	....	....	....	....	....	....	....	77	77
Porvenir (Veta No. 4 included)	....	....	....	....	....	....	....	....	12	34	124	105	275
Rosario	....	....	....	....	....	....	....	....	....	....	....	....	....
Salvador, Veta No. 1 & 2	166	280	452	145	206	315	330	596	383	577	371	404	4,225
San Benito	17	34	16	9	109	51	....	....	....	....	....	5	241
San Blas	127	19	181	55	28	105	49	50	....	....	....	....	614
Santa Gertrudis	....	53	118	35	118	166	108	231	246	81	....	....	1,156
San Luis	....	....	....	....	....	....	....	....	....	....	....	....	....
Socorro	....	....	....	....	....	....	....	....	....	....	....	....	....
South San Miguel	96	....	....	57	29	109	21	90	97	75	140	45	759
Southwest	29	15	....	....	....	....	....	....	....	....	....	....	44
Termópilas	....	....	....	....	....	....	....	....	....	....	....	....	....
Totals	818	885	1,107	496	824	1,421	1,245	1,306	1,030	1,081	839	889	11,941
From Stope Fills	36	58	90	29	....	9	....	184	18	190	231	170	1,015
GRAND TOTAL	9,419	8,592	9,773	8,337	7,201	8,406	8,394	8,910	9,849	10,533	9,780	9,190	108,384

Annex "E"
Tonnage Mined from October 1, 1907, to January 1, 1928

Veins	Total including Stoping, Devel. & Filling Oct 1/07 to Dec. 31/26	Total including Stoping, Devel. & Filling Year 1927	Grand Total including Stoping, Devel. & Filling January 1, 1928
Buena Ventura	98,119	....	98,119
Candelaria Group	164,023	1,051	165,074
Capitana	54,244	24	54,268
Carmen	17,526	....	17,526
Catalina	5,021	459	5,480
Colonia	52,336	1,699	54,035
Concepción	19,170	....	19,170
Crisanta	7,410	....	7,410
Culebra	84,423	9,630	94,053
Esperanza	8,710	....	8,710
Fortuna	22,631	19,021	41,652
Guadalupe	60,891	286	61,177
Independencia	42,110	16,969	59,079
Jucuara	2,207	....	2,207
North	4,647	....	4,647
Northwest	81,424	958	82,382
Nueva	28,147	....	28,147
Porvenir	1,045	433	1,478
Rosario	147,591	3,324	150,915
Salvador	182,318	31,823	214,141
San Benito	1,416	2,865	4,281
San Blas	456	1,895	2,351
San Joaquin	63,030	....	63,030
San Luis	422	500	922
San Miguel North	174,801	....	174,801
San Miguel South	103,053	4,529	107,582
Santa Fé	50	....	50
Santa Gertrudis	14,810	12,008	26,818
Socorro	20,208	761	20,969
Southwest	20,451	58	20,509
Termópilas	1,003	91	1,094
West	96,533	....	96,533
Ore from Development	63,599	....	63,599
Miscellaneous	1,573	....	1,573
Totals	1,645,398	108,384	1,753,782

Summary
October, 1907, to January 1, 1928

From Stoping	1,392,364
From Development	128,041
From Fills	233,377
Total	1,753.782

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NEW YORK AND HONDURAS ROSARIO MINING COMPANY

Annual Report

for the Year Ended December 31, 1927

submitted by

President Lewis L. Clarke

at the

Annual Meeting of the Stockholders

April 4, 1928

New York, April 4, 1928

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

Your company has done a satisfactory business during the year 1927. While it is not possible to report as large a production as during the years immediately preceding, the results are over the 2,000,000 ounce mark in silver, a record which the company has consistently maintained including and since 1923. The production for 1927 was 2,165,225.53 ounces silver and 5584.233 ounces gold, compared with 1926, which was 2,468,911.07 ounces silver and 5561.05 ounces gold. The reduction in the silver production is explained by our General Manager, as follows:

The production of silver in the past year fell somewhat short of expectations. As already explained in other parts of this report, it was due to much of the ore coming from the margins of the principal ore bodies where less constancy in vein width and valuable content resulted in lower tonnage output per man and lower milling grade. Inability to extend the mining of ore over the night shift owing to shortage of labor prevented the drop in grade being made up by production of a larger tonnage. The 1927 silver production, however, should be looked upon with some satisfaction, because though not equal to that of 1926, it must not be forgotten that 1926 was a banner year in the 47 years' operating history of the property.

In appraising the results of last year's business as reflected in our financial statements which I am making a part of this report, it must be borne in mind that the market price of silver has made a recovery which, however, has not brought it to a figure comparable with those of the past five years. A single illustration will be sufficient when I compare the realized price of 1926—$.6021 with that of 1927 of $.5662, or a difference of $.0359 on the product of this last year.

Following are the details pertaining to the mine production for the past two years:

	Year 1927	Year 1926	Increase Decrease
Total Sales Value of Gold and Silver Recovered	$1,341,300.06	$1,601,429.35	$260,129.29
Tons of Ore Milled	108,400	109,670	1,270
Ounces of Silver Recovered	2,165,225.536	2,468,911.07	303,685.534
Number of Ounces of Silver Recovered per Ton of Ore	19.9744	22.5122	2.5378
Ounces of Gold Recovered	5,584.233	5,561.057	23.176
Sales Value of Silver Recovered	$1,225,874.06	$1,486,482.34	$260,608.28
Average Sales Value of Silver per Ounce	$ .5662	$ .6021	$ .0359
Average Cost of Silver per Ounce	$ .4029	$ .3528	$ .0501
Average Profit on Silver per Ounce.	$ .1633	$ .2493	$ .0860
Total Sales Value of Gold Recovered	$ 115,426.00	$ 114,947.01	$ 478.99
Value of Gold per Ounce	$ 20.67	$ 20.67	.....
Value of Silver Recovered per Ton of Ore	$ 11.3088	$ 13.5541	$ 2.2453
Average Cost of Silver per Ton of Ore	$ 8.0469	$ 7.9429	$ .1040
Average Profit on Silver Recovered per Ton of Ore	$ 3.2619	$ 5.6112	$ 2.3493
Value of Gold Recovered per Ton of Ore	$ 1.0648	$ 1.0481	$ .0167
Number of Bars of Bullion Shipped from Mine	1,297	1,506	209

Income and Profit and Loss Statement
For the year ended December 31, 1927

Production of Gold and Silver			$1,341,300.06	
Less: Freight and Expenses on Bullion			55,443.02	
Operating Income				$1,285,857.04
Deduct: Operating Expenses				867,447.41
Operating Profit				418,409.63
Deduct: New York Administrative Expenses				64,819.58
Net Profit from Operations				353,590.05
Other Income				138,761.83
				492,351.88
Other Deductions				29,541.27
Net Profit Before Federal Income Tax and Provision for Reserves				462,810.61
Federal Income Tax				23,343.62
Net Profit for Year				439,466.99
Appropriated for Reserves from Earnings—				
Depletion (Based upon valuation of mine at March 1, 1913)			$ 18,762.92	
Fire Insurance			7,070.21	
Transit Insurance			3,570.53	29,403.66
Profit for Year Carried to Surplus				410,063.33
Surplus—				
Surplus, January 1, 1927			1,956,435.63	
Additions—				
Increase during 1927 in market values of securities owned at December 31, 1927	$ 33,263.27			
Sundry Surplus Credits	34,005.03	$ 67,268.30		
Deductions—				
Dividends Paid and Provided	400,000.00			
Depletion (On appreciated mine valuation)	18,762.91			
Sundry Surplus Charges	30,700.62	449,463.53	382,195.23	1,574,240.40
Surplus—December 31, 1927				$1,984,303.73

NOTE— During the year 1927 the United States Government authorized a readjustment of our depletion account due to certain new discoveries. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Entries recording Depletion on the new discoveries will be made in a supplementary memorandum ledger account, wherein is set up the values allowed by the Treasury Department and showing the actual depletion sustained and allowable for each year. These depletion entries are made for income tax purposes only.

Condensed Balance Sheet
December 31, 1927

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion	2,079,985.76	$ 920,014.24	
Plant Buildings, Machinery and Equipment	$1,481,594.48		
Less: Allowance for Depreciation	1,007,882.40	473,712.08	$1,393,726.32
Current—			
Cash		$ 33,023.37	
Call Loan plus Interest (Secured)		80,147.27	
Sundry Debtors		3,667.60	
Bullion at Smelters and in Transit at Market Less Allowance for Expenses		222,502.80	
Broken Ore in Stopes and Mill Bins—At Cost		88,476.87	
Materials and Supplies—At Cost		242,925.06	
U. S. Securities at Market plus Interest		489,595.89	
Other Marketable Securities at Market plus Interest		1,480,437.89	2,640,776.75
Other Assets—			
Sundry Accounts Receivable		$ 14,229.90	
Capital Stock of Other Company (Nominal Value		1.00	14,230.90
Deferred Charges—			
Prepaid Insurance, Taxes and Expenses			239,306.32
TOTAL ASSETS			$4,288,040.29

LIABILITIES

Current—			
Drafts Payable		$ 23,491.07	
Accounts Payable		53,448.00	
Federal Income and Profits Taxes		40,890.96	117,830.03
Reserves—			
Mine Fire Insurance		$ 63,854.06	
Transit Insurance		21,032.75	
Dividends—Payable January, 1928		100,000.00	
Property Replacement		1,019.72	185,906.53
Capital Stock—			
Authorized and Issued—200,000 shares of a Par Value of $10.00 per share		$2,000,000.00	
Surplus—			
Earned	$1,373,013.74		
Appreciation of Mine Valuation	$1,500,000.00		
Less Depletion Earned	888,710.01	611,289.99	1,984,303.73	3,984,303.73
			$4,288,040.29

The financial position of the Company at the beginning and at the close of the year 1927 based upon Balance Sheets prepared by the auditors at both dates is set forth below in condensed comparative form.

	December 31, 1927	December 31, 1926	Increase / Decrease
Current Assets	$2,640,776.75	$2,633,939.06	$ 6,837.69
Current Liabilities	117,830.03	123,768.59	5,938.56
NET CURRENT ASSETS	2,522,946.72	2,510,170.47	12,776.25
Other Assets	14,230.90	9,717.05	4,513.85
Permanent Assets—Less: Depreciation	473,712.08	512,815.54	39,103.46
Mines, Real Estate and Concessions—Less: Depletion of Mines	920,014.24	957,540.07	37,525.83
Deferred Charges	239,306.32	140,438.57	98,867.75
	$4,170,210.26	$4,130,681.70	$39,528.56
Represented by:			
Reserves—Insurance	$ 84,886.81	$ 74,246.07	$10,640.74
Reserve—Dividends Payable	100,000.00	100,000.00	.....
Reserve—Property Replacement	1,019.72	.....	1,019.72
Capital Stock	2,000,000.00	2,000,000.00	.....
Surplus	1,984,303.73	1,956,435.63	27,868.10
	$4,170,210.26	$4,130,681.70	$39,528.56
Ratio of Current Assets to Current Liabilities	22.41 to 1	21.28 to 1	1.13 to 1

Dividends Paid

April, 1927	$100,000.00	
July, 1927	100,000.00	
October, 1927	100,000.00	
January, 1928	100,000.00	
		$400,000.00

Auditor's Certificate

WE HEREBY CERTIFY that we examined the books of account and record of the NEW YORK & HONDURAS ROSARIO MINING COMPANY, NEW YORK CITY, for the year ended December 31, 1927 and, subject to the fact that we did not examine the records at the mine office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at December 31, 1927, and that the related Income and Profit and Loss Statement is correct.

(Signed) ERNST & ERNST.

Government of Honduras

We have had many important questions under consideration with the Government of Honduras during the past year, and we wish to extend to that Government and its representatives our thanks for the courtesies that have been extended to us, and our best wishes for the prosperity of the people of Honduras.

All of which is respectfully submitted,

LEWIS L. CLARKE,
President.

REPORT of the
NEW YORK & HONDURAS
ROSARIO MINING CO.

1928

NEW YORK

January 1, 1929

OFFICERS 1929-1930

LEWIS L. CLARKE, *President*

H. A. GUESS, *Vice-President*

A. R. GORDON, *Vice-President*

W. C. LANGLEY, *Treasurer*

J. PERLMAN, *Secretary*

BOARD OF DIRECTORS 1929-1930

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY	W. C. LANGLEY
LEWIS L. CLARKE	W. L. SAUNDERS
H. A. GUESS	E. V. SOTO
IRVING HEIDELL	AMBROSE G. TODD
DR. J. RALPH JACOBY	DR. JULIUS J. VALENTINE

P. R. WEILER

EXECUTIVE COMMITTEE 1929-1930

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY	W. L. SAUNDERS
H. A. GUESS	AMBROSE G. TODD

P. R. WEILER

LEWIS L. CLARKE, W. C. LANGLEY } *Ex-Officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company for the Year Ended December 31st, 1928

New York, April 3, 1929.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

It is my pleasure to report to you that the year 1928 has proved to be one of the most satisfactory in the history of the Company. Our production showed a gratifying improvement. Ounces of silver recovered were 2,275,103, as compared with 2,165,225 in 1927. Ounces of gold were 8,510, compared with 5,584 in 1927, and the cost of this production was reduced below the cost of 1927, as explained in a statement which follows.

Dividends to the amount of $450,000.00 were paid during 1928, or an increase of $50,000.00 over the amount paid in 1927.

I wish also to direct attention to the fact that, of the Miscellaneous Income for the year 1928, $140,042.41 was derived from other than mining operations, and represents 20.83% of the total income of $672,321.50.

In accordance with custom, I am presenting with this report financial tables which give a complete picture of the Company's status.

The following statement presents the essential facts explaining the quantity and value of our production for the years 1928 and 1927, and also the costs and profits on the basis of ounces and tons produced:

	Year 1928	Year 1927	Increase Decrease
Total Sales Value of Gold and Silver Recovered	$1,500,233.98	$1,341,300.06	$158,933.92
Tons of Ore Milled	110,600	108,400	2,200
Ounces of Silver Recovered	2,275,103.100	2,165,225.536	109,877.564
Number of Ounces of Silver Recovered per Ton of Ore	20.5705	19.9744	.5961
Ounces of Gold Recovered	8,510.759	5,584.233	2,926.526
Sales Value of Silver Recovered	$1,324,316.61	$1,225,874.06	$ 98,442.55
Average Sales Value of Silver per Ounce	$ .5821	$ .5662	$ .0159
Average Cost of Silver per Ounce	$ .3602	$ .4029	$ *.0427
Average Profit on Silver per Ounce	$ .2219	$ .1633	$ .0586
Total Sales Value of Gold Recovered	$ 175,917.37	$ 115,426.00	$ 60,491.37
Value of Gold per Ounce	$ 20.67	$ 20.67	$ .....
Value of Silver Recovered per Ton of Ore	$ 11.9739	$ 11.3088	$ .6651
Average Cost of Silver per Ton of Ore	$ 7.4107	$ 8.0469	$ *.6362
Average Profit on Silver Recovered per Ton of Ore	$ 4.5632	$ 3.2619	$ 1.3013
Value of Gold Recovered per Ton of Ore	$ 1.5905	$ 1.0648	$ .5257
Number of Bars of Bullion Shipped from Mine	1,362	1,297	65

* Decrease.

Income and Profit and Loss Statement
For the Year Ended December 31, 1928

Production of Gold and Silver			$1,500,233.98	
Less: Freight and Expenses on Bullion			57,946.67	
Operating Income				$1,442,287.31
Deduct: Operating Expenses				871,209.81
Operating Profit				571,077.50
Deduct: New York Administrative Expenses				66,387.94
Net Profit from Operations				504,689.56
Other Income				167,631.94
				672,321.50
Other Deductions				30,886.08
Net Profit Before Federal Income Tax and Provision for Reserves				641,435.42
Federal Income Tax				37,102.80
Net Profit for Year				604,332.62
Appropriated for Reserves from Earnings—				
Depletion (Based upon valuation of Mine at March 1, 1913)			$ 14,138.04	
Fire Insurance			8,114.24	
Transit Insurance			4,101.23	26,353.51
Profit for the Year Carried to Surplus				577,979.11
Surplus—				
Surplus—January 1, 1928			1,984,303.73	
Addition—				
Adjustment of 1928 Depletion Charges		$ 628.08		
Deductions—				
Dividends Paid and Provided	$450,000.00			
Decrease during 1928 in market value of Securities owned at December 31, 1928	79,000.62			
Additional Federal Income Tax—1927	1,826.24			
Depletion (On appreciated mine valuation)	14,138.04	544,964.90	544,336.82	1,439,966.91
Surplus—December 31, 1928				$2,017,946.02

NOTE—

— During the year 1927 the United States Government authorized a readjustment of our depletion account due to certain new discoveries. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Entries recording depletion on the new discoveries will be made in a supplementary memorandum ledger account wherein is set up the values allowed by the Treasury Department and showing the actual depletion sustained and allowable for each year. These depletion entries are made for income tax purposes only.

Condensed Balance Sheet
December 31, 1928

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion of Mines	2,107,633.76	$ 892,366.24	
Plant Buildings, Machinery and Equipment	$1,533,166.36		
Less: Allowance for Depreciation	1,085,709.46	447,456.90	$1,339,823.14
Current—			
Cash		$ 81,301.48	
Call Loans plus Interest (Secured)		301,391.66	
Bullion at Smelters and in Transit at Market Less: Allowance for Expenses		316,758.25	
Broken Ore in Stopes and Mill Bins—At Cost		90,160.21	
Materials and Supplies—At Cost		240,828.32	
U. S. Securities at Market plus Interest		362,580.87	
Other Marketable Securities at Market plus Interest		1,377,395.83	2,770,416.62
Other Assets—			
Sundry Accounts Receivable		6,487.90	
Capital Stock of Other Company (Nominal Value)		1.00	6,488.90
Deferred Charges—			
Prepaid Insurance, Taxes and Expenses			261,131.84
TOTAL ASSETS			$4,377,860.50

LIABILITIES

Current—			
Drafts Payable		$ 49,305.23	
Accounts Payable		47,483.21	
Federal Income Tax—1928		37,102.80	$ 133,891.24
Reserves—			
Dividends—Payable January, 1929		$ 100,000.00	
Mine Fire Insurance		71,968.30	
Transit Insurance		25,133.98	
Sabana Grande Honduras Mining Co. Advances		27,921.57	
Property Replacement		999.39	226,023.24
Capital Stock—			
Authorized and Issued—200,000 shares of a Par Value of $10.00 per share		$2,000,000.00	
Surplus—			
Earned	$1,420,480.03		
Appreciation of Mine Valuation	$1,500,000.00		
Less Depletion Earned	902,534.01	597,465.99	2,017,946.02	4,017,946.02
			$4,377,860.50

No contingent liabilities were reported to us and so far as we could ascertain none existed.

The financial position of the Company at the beginning and at the close of the year 1928 based upon Balance Sheets prepared by the auditors at both dates is set forth in condensed comparative form.

	December 31, 1928	December 31, 1927	Increase Decrease
Current Assets	$2,770,416.62	$2,640,776.75	$ 129,639.87
Current Liabilities	133,891.24	117,830.03	16,061.21
NET CURRENT ASSETS	2,636,525.38	2,522,946.72	113,578.66
Other Assets	6,488.90	14,230.90	*7,742.00
Permanent Assets—Less: Depreciation	447,456.90	473,712.08	*26,255.18
Mines, Real Estate and Concessions—Less: Depletion of Mines	892,366.24	920,014.24	*27,648.00
Deferred Charges	261,131.84	239,306.32	21,825.52
	$4,243,969.26	$4,170,210.26	$ 73,759.00
Represented by:			
Reserve—Insurance	$ 97,102.28	$ 84,886.81	$ 12,215.47
Reserve—Dividends Payable	100,000.00	100,000.00	.....
Reserve—Sabana-Grande Advances	27,921.57		27,921.57
Reserve—Property Replacement	999.39	1,019.72	*20.33
Capital Stock	2,000,000.00	2,000,000.00	.....
Surplus	2,017,946.02	1,984,303.73	33,642.29
	$4,243,969.26	$4,170,210.26	$ 73,759.00
Ratio of Current Assets to Current Liabilities	20.69 to 1	22.41 to 1	*1.72 to 1

* Decrease

Dividends Paid

April, 1928	$100,000.00	
July, 1928	100,000.00	
October, 1928	100,000.00	
December, 1928	50,000.00	
January, 1929	100,000.00	
		$450,000.00

Auditors' Certificate

WE HEREBY CERTIFY that we examined the books of account and record of NEW YORK & HONDURAS ROSARIO MINING COMPANY, NEW YORK CITY, for the year ended December 31, 1928, and, subject to the fact that we did not examine the records at the mine office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at December 31, 1928, and that the related Income and Profit and Loss Statement is correct.

(Signed) ERNST & ERNST.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
1925	1,763,023.16
1926	1,601,429.35
1927	1,341,300.06
1928	1,500,233.98
	$40,633,994.71

Distribution to Stockholders

1887	No. 1	$37,500— 2½% Dividend
1888	Nos. 2 to 5	60,000— 4% Dividend
1889	Nos. 6 to 14	150,000—10% Dividend
1891	Nos. 15 to 16	30,000— 2% Dividend
1892	Nos. 17 to 21	165,000—11% Dividend
1893	Nos. 22 to 25	150,000—10% Dividend
1894	No. 26	37,500— 2½% Dividend
1896	Nos. 27 to 28	30,000— 2% Dividend
1897	Nos. 29 to 40	180,000—12% Dividend
1898	Nos. 41 to 48	120,000— 8% Dividend
1899	Nos. 49 to 60	180,000—12% Dividend
1900	Nos. 61 to 75	225,000—15% Dividend
1901	Nos. 76 to 93	300,000—20% Dividend
1902	Nos. 94 to 100	105,000— 7% Dividend
1903	No. 101	15,000— 1% Dividend
1904	Nos. 102 to 108	105,000— 7% Dividend
1905	Nos. 109 to 121	180,000—12% Dividend
1906	Nos. 122 to 139	285,000—19% Dividend
1907	Nos. 140 to 153	210,000—14% Dividend
1908	Nos. 154 to 165	180,000—12% Dividend
1909	Nos. 166 to 173	120,000— 8% Dividend
1910	Nos. 174 to 180	105,000— 7% Dividend
1911	Nos. 181 to 182	90,000— 6% Dividend
1912	Nos. 183 to 184	70,000— 3½% Dividend
1913	Nos. 185 to 188	180,000— 9% Dividend
1914	Nos. 189 to 193	240,000—12% Dividend
1915	Nos. 194 to 197	240,000—12% Dividend
1916	Nos. 198 to 205	400,000—20% Dividend
1917	Nos. 206 to 211	300,000—15% Dividend
1917	No. 1	100,000— 5% Amortization
1918	Nos. 212 to 215	200,000—10% Dividend
1918	Nos. 2 to 5	200,000—10% Amortization
1919	Nos. 216 to 219	200,000—10% Dividend
1919	Nos. 6 to 9	200,000—10% Amortization
1920	Nos. 220 to 225	320,000—16% Dividend
1920	Nos. 10 to 11	80,000— 4% Amortization
1921	No. 226	60,000— 3% Dividend
1922	Nos. 227 to 229	150,000— 7½% Dividend
1923	Nos. 230 to 234	250,000—12½% Dividend
1924	Nos. 235 to 240	350,000—17½% Dividend
1925	Nos. 241 to 247	350,000—17½% Dividend
1926	Nos. 248 to 255	400,000—20% Dividend
1927	Nos. 256 to 263	400,000—20% Dividend
1928	Nos. 264 to 272	450,000—22½% Dividend
	Total	$8,200,000

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 272, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00

Comparative Statement of Net Assets

FOR THE YEARS ENDED DECEMBER 31st AS BELOW

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
CURRENT ASSETS—											
Cash and Cash Items	$361,399	$172,165	$470,377	$283,570	$308,423	$474,620	$ 146,298	$ 184,750	$ 94,999	$ 116,838	$ 382,693
Marketable Securities	323,500	208,800	179,822	408,485	564,611	546,239	1,394,411	1,818,692	1,932,105	1,970,034	1,739,977
Bullion in Transit	387,348	805,137	231,770	1,145	142,270	307,157	261,416	263,334	242,857	222,503	316,758
Ore in Stopes and Mill Bin	112,126	95,134	120,978	114,217	91,467	88,245	107,375	77,385	77,665	88,477	90,160
Materials and Supplies	401,343	329,101	403,393	308,464	191,772	210,782	235,033	247,461	286,312	242,925	240,828
Total Current Assets	$1,585,716	$1,610,337	$1,406,340	$1,115,881	$1,298,543	$1,627,043	$2,144,533	$2,591,622	$2,633,938	$2,640,777	$2,770,416
Deduct: Current Liabilities	694,372	522,062	199,069	218,387	218,305	205,153	262,560	278,038	123,768	117,830	133,891
Net Current Assets	$891,344	$1,088,275	$1,207,271	$897,494	$1,080,238	$1,421,890	$1,881,973	$2,313,584	$2,510,170	$2,522,947	$2,636,525
OTHER ASSETS—											
Accounts Receivable, Investments, Deferred Charges, etc.	237,026	368,378	144,173	178,546	269,179	312,547	222,260	139,276	150,155	253,536	267,620
PERMANENT—											
‡Mines, Real Estate, Concessions, Buildings, Machinery, etc. (less Allowances for Depreciation)	2,213,070	2,188,829	2,134,275	2,116,892	2,080,317	2,030,539	2,032,953	2,030,457	2,012,815	1,973,712	1,947,457
*Total Net Assets	$3,341,440	$3,645,482	$3,485,719	$3,192,932	$3,429,734	$3,764,976	$4,137,186	$4,483,317	$4,673,140	$4,750,195	$4,851,602
Increase of Net Current Assets over Preceding Year		$196,931	$118,996	†$309,777	$182,744	$341,652	$460,083	$431,611	$196,586	$12,777	$113,578
Increase of Net Current Assets over December 31, 1918		$196,931	$315,927	$6,150	$188,894	$530,546	$990,629	$1,422,240	$1,618,826	$1,631,603	$1,745,181

* Represented by Capital Stock, Surplus, Reserves for Depletion, Exchange Fluctuation, Contingencies, etc., with no adjustment for increased valuation of mines, etc.

† Decrease.

‡ Not adjusted for increased valuation of mines.

Government of Honduras

In the course of our operations in Honduras, we are required to have frequent business discussions with the Government of Honduras. We desire at this time to express our appreciation of the attitude of the Government and the courtesies shown to us by its representatives. We also renew the expression of our sincere good wishes for the prosperity of the people of Honduras.

LEWIS L. CLARKE,
President.

Annual Report of the General Manager

January 1, 1929.

TO THE PRESIDENT,
NEW YORK & HONDURAS ROSARIO MINING COMPANY,
NEW YORK, N. Y.

DEAR SIR:

The following is a report of operations on the Company's mining properties in Honduras during the year 1928:

Production

	1928	1927
Dry tons treated	110,600	108,400
Average per ton—Troy ounces silver	22.323	21.69
Average per ton—Troy ounces gold	.081	.0546
Total Troy ounces silver produced	2,287,031	2,172,753
Total Troy ounces gold produced	8,500	5,684
Ratio of silver to gold	269 : 1	382 : 1
Bars Doré Bullion	1,362	1,297
Bullion fineness, silver	979.83	979.49
Bullion fineness, gold	3.59	2.55
Custome Ore: Included in totals above:		
Silver	5,940.80 ozs.	554.02
Gold	8.403 "	82.821

The outstanding feature of the 1928 production is the increase in gold production by 2,891 ounces or 51½% as compared with 1927. The output of silver was greater by 108,892 ounces.

There is reason to believe that under normal operating conditions the 1929 silver output should more or less equal that of 1928 and the gold output be somewhat better.

Honduras Operating Costs

Operating Basis:	1928	1927
Dry tons milled	110,600	108,400
Troy ounces silver produced	2,281,090	2,172,198
Troy ounces gold produced	8,492	5,601
Total Troy ounces bullion produced	2,289,582	2,177,799
Feet exploration and development driven	22,147	18,892.5
Average rate of exchange	202.625%	209.786%

	Total Costs		Per Ton		Per Troy Ounce Fine Bullion Produced	
Mine	1928	1927	1928	1927	1928	1927
Labor	$288,157.65	$275,121.95	$2.61	$2.54	$.1259	$.1263
Supplies	162,277.78	164,628.73	1.47	1.52	.0709	.0756
Power	6,044.40	6,664.04	.05	.06	.0026	.0031
Totals	$456,479.83	$446,414.72	$4.13	$4.12	$.1994	$.2050
Mill						
Labor	$ 51,222.92	$ 56,029.82	$ .46	$ .52	$.0224	$.0257
Supplies	142,523.77	177,030.95	1.29	1.63	.0622	.0813
Power	6,362.79	9,815.65	.06	.09	.0028	.0045
Totals	$200,109.48	$242,876.42	$1.81	$2.24	$.0874	$.1115
Honduras Administration	$127,720.73	$135,029.06	$1.15	$1.25	$.0558	$.0620
Totals	$784,310.04	$824,320.20	$7.09	$7.61	$.3426	$.3785
Credit value of gold produced	$175,359.80	$112,014.92	$1.59	$1.03	$.0759	$.0514
Net cost of silver	$608,950.24	$712,305.28	$5.50	$6.58	$.2667	$.3271
Cost per Troy ounce silver produced	$.2667	$.3271				

Inspection of the above comparative statement shows that despite a less favorable rate of exchange by 3.58%, an increase in development by 3,254.5 feet, or 17%, and larger tonnage sent to the Mill, mining costs per ton mined and per ounce bullion produced are the same as in 1927. Milling costs show a marked decrease notwithstanding that 111,783 ounces more of silver and gold were produced. A reduction in Administration costs is also indicated.

Summing up and comparing with the year 1927 it appears that in 1928, 2,200 tons more ore were mined and milled, 111,783 ounces more of bullion produced, 3,254.5 feet more of development driven at a total cost of $40,010.16 less.

FINANCIAL

Exchange

	1928	1927
Drafts on Treasurer during year	$ 597,950.27	$ 624,658.17
Yield in Pesos	1,211,592.14	1,310,444.09
Rate of Exchange, average for year	202.625%	209.786%
Exchange Earnings, on Basis of Prescribed Rate of Exchange of 200%	$ 7,845.80	$ 30,563.87
Lowest Rate of Exchange during year	201%	208%
Highest Rate of Exchange during year	208%	214%
Rate of Exchange as of December 31st	201%	210%

As the above statement indicates, there was a drop of 7.16 points or 3.58% in the average rate of exchange between Central American silver currency and American dollars when compared with the year 1927. This means that all expense items in Honduras such as wages, freight, local supplies, etc., amounting in 1928 to approximately 1,211,592 pesos, cost 3.58% more than in 1927. There are indications that the present exchange rate of 201 will be maintained for some time.

THE MINE

Ore Reserves

The following summary shows four classes of ore reserves, the details of each of which will be found in Annex "A". The calculated reserves are also shown on the mine maps on file in this office.

Summary

	Tons of Ore and Waste	Ozs. Ag. Per Ton	Ozs. Au. Per Ton	Total Ozs. Ag.	Total Ozs. Au.
Calculated Ore, at 13 cu. ft.	212,900	21.67	.069	4,612,900	14,889
Estimated Ore, at 13 cu. ft.	34,000	12.63	.059	429,420	2,006
Estimated Stope Filling, at 17 cu. ft.	10,000	10.00	.035	100,000	355
Broken Ore in Stopes, at 21 cu. ft.	17,707	24.89	.099	440,727	1,753
Total Reserve as of Jan. 1, 1929	274,607	20.33	.069	5,583,047	19,003

Comparison with 1927 reserve figures shows that the present reserves are less by 21,832 tons and 356,928 ounces silver, the gold, on the other hand, being 3,443 ounces more. The average value of the total reserve is 0.29 ounce silver and 0.016 ounce gold higher.

The reserves of the Salvador-Fortuna-Carmen Group and the Independencia Group, appearing in Annex "A", do not include ore in prospect and of which it is estimated there are more than 400,000 tons of good grade, part of which will come into the production for 1929.

As a result of past years' development three new veins appear in the calculated reserves, the San Benito, Santa Fe and San Luis. They hold out good future possibilities, which are discussed in detail further on in this report.

ORE PRODUCTION

The monthly and yearly ore production by veins is shown in Annexes "D" and "E", the following being a summary of Annex "D":

	1928	1927
By Stoping	95,704 tons	95,428 tons
From Development Excavation	14,845 tons	11,941 tons
Stope Filling		1,015 tons
Total	110,549 tons	108,384 tons
Number of Producing Veins	19	26

Connection between the Lower 650 and Zero Esperanza levels by raises Nos. 2 and 3 not only solved for some time the question of ventilation but immediately made available ore for the Mill from the Esperanza group of veins below the Upper 150 level and which ore, until these raises holed through, could not be mined in any quantity, there being no means of getting it down to the Lower 650 mill level electric haulage. Stoping in this same district, but above the Upper 150 level, was reduced, the object being to mine these places at a slower rate and obtain cleaner, therefore better, grade ore.

Development of the Esperanza group of veins below the Upper 150 level received first attention throughout the year. The layout of levels and principal chutes is so planned that not only will it be possible to handle large daily tonnages of ore and waste on the individual levels, but the aggregate can be moved from the main chutes without delay by the Lower 650 electric haulage. There is every reason to believe that owing principally to these preparations decidedly cheaper mining will result.

During 1928 the Esperanza section of the Mine produced 84,393 tons, or about 76.4% of all the ore milled. It is expected that this section will produce at even a greater rate in the coming year.

The old section of the Mine produced the remainder, or 26,156 tons, most of this being of low grade.

The supply of underground labor was more adequate than for some years past, there frequently being more men than could be employed. 308 day shifts were worked, the average number of men per shift being 470, including all top men such as blacksmiths, carpenters, etc. The night shift was larger than for many years past, its work being confined mostly to exploration and development. There were 302 night shifts with an average of 69 men per shift. In 1927 there were 309 day shifts with 515 men per shift and 230 night shifts with about 40 men per shift.

Exploration, Development and Mining

Summary of Footage Driven

Year	Drifts	Cross-cuts	Raises	Winzes	Misc.	Total
1928	9,775.0	7,507.0	3,937.0	249.5	678.5	22,147.0
1927	7,484.5	5,785.5	3,536.0	38.0	2,048.5	18,892.5

The increasing irregularity, impoverishment and decrease in size of some of the principal ore bodies which were the mainstay of the Mine in recent years made it imperative during 1928 to adopt an unusually large program of exploration and development in the search for new veins and in the opening up and making available for large scale mining ore bodies already known to exist. Due to this, the footage driven in 1928 was 3,254.5 feet more than in the year previous. A comparative summary of the total footage driven is shown in the table above, a detailed distribution of which appears in Annex "C". This information appears also on the mine maps where, when the work was done on a vein, the vein width and assay results in silver and gold are shown at 5 ft. intervals.

Connections

As in the year previous, it was necessary to drive connections, cutoffs and stations to facilitate operations in general, but such work only amounted to 678.5 feet as compared with 2,048.5 feet in 1927.

The more important exploration and development work, its results and future prospects are briefly described under the following headings:

Buena Ventura Vein

This vein produced 371 tons of ore in 1928, which came from the Lower 300 foot level. A small quantity still remains which may be mined in the coming year.

Candelaria Group

Work in this group consisted in driving 314.5 feet eastward on the main vein at the Upper 600 Candelaria level. A small lens of high grade gold bearing ore was picked up, most of which has already been mined above the Upper 600 level. The east heading is now traversing an expected barren zone but should again enter ore-bearing ground in the vicinity of Blocks 37 and 38. The plan is to continue driving the Upper 600 east heading during 1929.

Capitana Vein

The driving of 301.5 feet at the Lower 200 and Lower 300 levels failed to disclose an ore-bearing vein, indicating that the ore body existing in the floor and shaft of the Lower 100 level is of comparatively shallow depth. In the coming year work may be resumed to reach the bottom of this ore body.

Catalina Vein

The 1,107 tons of ore mined came from stopes at the Upper 150 and Upper 250 levels. While the pure vein matter is of high grade, the vein is very irregular and in hard rock to which it is frozen, resulting in excessive dilution. The Catalina holds out some prospects above the Upper 250 level and southward, but no work is anticipated in this section in the coming year.

Colonia Vein

Most of the 2,321 tons of ore produced in the past year came from workings below the Lower 300 level. The ore in this section is of low grade and at the present time it will not pay to mine it to a greater depth. There are small ore pillars scattered throughout the old workings above the Lower 300 level, some of which probably will be mined in the coming year.

Culebra Vein

The ore mined during 1928—4,817 tons—is about half the quantity obtained the year previous and probably was of lower grade. The 666.5 feet of development was on the upper levels and done mostly to make available existing ore.

It is expected that the Culebra will produce about the same quantity of ore in 1929, but there will be less development.

Jucuara Vein

It was stated in the 1927 report that a crosscut would be driven off the Upper 250 Santa Gertrudis level to intersect the Jucuara vein. This work was done in 1928 and whilst the crosscut reached the region where the Jucuara vein should exist, nothing except a gouge streak was encountered. A little more work is advisable before it can be definitely stated that the Jucuara vein does not exist in this section.

Northwest Vein

This vein produced 6,175 tons of ore as compared with 711 tons in the year previous. Most of it was of good grade (about 19 ounces silver per ton) and came from stopes between the Lower 100 and Lower 300 levels, Blocks 46 to 49. An important quantity still remains which is now being mined. Little or no development is to be done until stoping is concluded.

Santa Gertrudis Vein

The 1,914 tons of ore mined in 1928 came mostly from the Upper 250 level and was, on the whole, of good grade. Assay results show high values for this vein, but owing to its irregularity and broken up character, waste dilution in mining is high.

Development consisted of 265 feet, principally at the Upper 350 level, where the heading was driven southward. Encouraging indications were disclosed by this work which fully warrant extensive development of the Santa Gertrudis above the Upper 350 level, where the territory overhead is extensive, the vein being under the highest portion of the mountain.

In the coming year it is planned to resume development at the Upper 350 level and to stope an ore body existing between the Zero and the Upper 150 levels.

San Joaquin Vein

A crosscut is being driven at the Lower 300 level, off the San Vicente vein, to intersect the San Joaquin about 275 feet north of its present Lower 300 level heading. The San Joaquin vein in this heading splits into two stringers both of which are barren. The reason the crosscut is being driven and not the heading is because the San Joaquin workings at the Lower 300 level are inaccessible. The crosscut is now 296 feet long.

Socorro Vein

The 85.5 feet of development driven and 431 tons of ore mined were in the section between the Upper 350 and Upper 600 levels. Scattered bunches of high grade ore existing mostly in a very narrow vein are being developed and mined and it is believed that the ore thus obtained just about pays for the work done to get it.

South San Miguel Group

The South San Miguel group consists of the South San Miguel vein proper and a branch vein, the latter carrying an important proportion of gold. The 7,166 tons of ore mined in the past year came almost entirely from the branch vein, wherein also most of the 662.5 feet of development was done. Sufficient ground has been opened up to permit mining in the coming year at about the same rate as in the year past. The character of the branch vein is such that careful mining is required to maintain a medium grade of ore and it is estimated that in 1928 this averaged about 14 to 16 ounces silver and $1.25 in gold per ton.

Whilst the South San Miguel vein in the south headings on all the levels is either barren or badly broken up, it is by no means certain that its southern ore limits have been reached; therefore, it is recommended that exploration be done to the south on one or two of the upper levels.

Termopilas Vein

The 130.5 feet of development was all confined to penetrating the lower reaches of this vein which at the surface produced some very high grade ore. This work, so far, has not proved successful and was stopped in the latter part of the year. It may be continued in the coming year.

West Vein

The 113.5 feet of development consisted in sinking deeper the shaft at the Upper 150 level in Block 65 and at the bottom driving on the vein to the east and west to open up the lens of ore which, above the Upper 150, yielded an important tonnage. This ore, mostly of low grade at this depth, is now being stoped, but it is expected will get better as the Upper 150 level is approached. 277 tons of ore were obtained in 1928 from this source.

Independencia Group

Work on the Independencia vein in the year past, all of which was below the Upper 150 level and which includes 3,678.5 feet of

development, resulted in a production of 27,164 tons of what unquestionably was the best grade ore mined during the year.

At the Zero level the eastern section of the vein is offset by a horizontal fault just above this level and having a slight dip to the west. Below this fault the vein is much lower in grade and more broken up. At the Lower 200 level, 130 feet below the Zero, more or less the same conditions exist, but it is believed that as development proceeds westward, away from the influence of this horizontal fault, and the western section of the vein between the Lower 200 and Zero levels is explored, important bodies of high grade ore will be encountered.

At the Lower 300 and Lower 400 levels it was found that the Independencia changes its dip from north to south and that it consists of two converging veins which at the Lower 400 Esperanza crosscut are 55 feet apart and come together 200 feet west of this crosscut, continuing thereafter as one vein. Also, at the Lower 300 and Lower 400 levels the character of the vein changes, the tendency being for the ore-bearing quartz to cut out and the ore, which at this elevation is a pronounced lead-zinc-iron sulphide, occurs in the country rock in the form of interlaced parallel streaks and stringers. Branch vein No. 2, which is the better of the two, has a gouge streak on the hanging wall up to 6 feet in width carrying, in places, fragments of ore. This gouge streak continues after the veins join. The ground between the two veins, and for some distance on each side, has numerous narrow fractures and stringers, most of them more or less parallel and interconnected, some being ore bearing. A careful record will be kept of all values in this section as its development progresses as there is a possibility that a considerable width and tonnage of lower grade ore may be thus opened up between these two veins.

The San Blas vein, which joins the Independencia on its dip at about the Zero level, produced 2,378 tons of ore and underwent 305 feet of development. This vein has good possibilities on the west end which are to be explored as soon as other work permits.

Salvador Group

(*Carmen - Fortuna - Salvador and Branch Veins*)

Salvador Vein

In the 1927 report the interrelation of these veins was explained and it was stated that in their southern extent and on their dip they join and form one vein which, for convenience, is being called the

Salvador Vein.

Development of the Salvador during the past year was heavy, amounting to 3,718.5 feet. Most of such work was on branch vein No. 1 at the Upper 250, Upper 350 and Upper 450 levels, which vein was also the source of about 13,000 tons of good ore. The Salvador vein proper was driven on northward at the Upper 350, Upper 450, Upper 550 and Upper 650 levels; but work on all, excepting the Upper 650 level, was stopped in order to use the drilling equipment on quicker sources of ore. Pockets of low grade ore were found at the Upper 550 level. At the Upper 650 level the ore, while likewise of low grade, has been more persistent, therefore this heading is still being driven. Some of the ore found at the Upper 650 level has been stoped and pay values were found to extend for about 125 feet above this level. A raise is to be driven from the top of this stope to reach the elevation of the Upper 800 Independencia adit crosscut and connection made with this crosscut for much needed ventilation. The only level at which development has been done to the south is at the Upper 350. The vein here seems to be more persistent than on any of the other levels and in the last 50 feet has been in milling grade ore. Should the ground in this section become less broken up the possibility of continuation of the vein in ore would be considered very good.

The other development work on the Salvador was at the Lower 200 and the Lower 400 levels. This vein below the Zero level has so far proved somewhat of a disappointment in that, while pockets of ore have been encountered, they are not as rich nor as uniform as was the case above that level. However, the unexplored portion below the Zero level is very large and the amount of development therein to date comparatively small; therefore, the possibility that better sections of the vein will be encountered as development proceeds is considered good.

Fortuna Vein

The Fortuna vein, its northeastern extension and the branch vein No. 4, were vigorously developed in the past year, the distance driven being 2,574 feet. The ore output for the group was 22,676 tons, of which 6,550 tons came from branch vein No. 4. The Fortuna vein was intersected by a crosscut at the Zero level and drifted upon. So far this work has proved disappointing, the vein, while ore bearing, being very narrow and irregular. In the coming year most of the development is to be confined to the Upper 250, Upper 350 and Upper 450 levels in the northeastern section, and the Zero, Upper 350 and Upper 450 levels in the southwestern section.

Carmen

The only work done in this vein in the past year was driving on it at the Upper 250 level a distance of 44.5 feet, and starting a crosscut for it at the Zero level. Work in the crosscut has been stopped owing to more pressing work but is to be resumed in the early part of the coming year. The Carmen vein has not been mined below the Upper 150 level. Two important bodies of high grade ore were mined at this level, and there is every reason to believe they will extend down to the Zero. This ore should be available in the latter part of the coming year.

San Luis Vein

What is believed to be the San Luis vein, or rather a series of three narrow ore-bearing stringers, one of which may be the San Luis, were intersected by the Lower 400 Esperanza crosscut in the latter part of the year. The most promising one is being driven on and so far has disclosed a vein about six inches wide, portions of which are very high grade. As in the case of the San Benito, the distance along the dip of this vein from the Lower 400 to the Upper 150 level, where it is next exposed, is over 500 feet. Whilst owing to the generally broken up character of the ground in the Esperanza section it cannot be assumed that the vein will be ore bearing between these two levels, the encountering of ore at depth of the Lower 400 foot level is encouraging and warrants full exploration of the intervening territory. The Lower 200 Esperanza crosscut, 260 feet above the Lower 400 Esperanza crosscut, is to be driven to intersect the San Luis, from which at the present time it is about 400 feet distant.

Santa Fe Vein

The Santa Fe is one of the last veins to be intersected by the Upper 150 Level Esperanza crosscut. It was fully described in the 1926 and 1927 Annual Reports. It has a dip of between 40 and 45 degrees to the north, the only vein in the mine with such a flat dip. The vein matter consists of loose white quartz which, excepting in isolated spots, is barren. The above conditions exist at the Upper 150 level and are more or less the same where the vein is intersected at the Lower 650 level, about 1,100 feet deeper along the dip or 770 feet vertically.

Evidence at the Upper 150 level led to the belief that the vein might be ore bearing at a horizon less deep than the Lower 650 level and in the 1927 Annual Report it was stated that it was planned to tap it at such intermediate levels. This was done last

Fall when the vein was intersected by the Lower 400 Esperanza crosscut. The Santa Fe at this point, which along its dip is 700 feet below its Upper 150 level workings, has more or less the same dip and is of milling grade over the entire width of the vein, which varies from 1 foot to 6 feet. The ore is lead-zinc-iron sulphide, which may be primary. Development is proceeding as rapidly as possible and it is believed that despite the fact that the vein is nearly barren at the Upper 150 and the Lower 650 levels the intervening territory, both vertically and laterally, is so extensive that possibilities for a large ore body are very good.

San Benito Vein

A winze was sunk on this vein below the Upper 150 level, a distance of about 75 feet. A sub-level was driven near the bottom and a body of high grade gold-bearing ore yielding 1,789 tons mined. The vein is being opened further at the sub-level to make another block of similar ore available.

What is believed to be the San Benito vein was intersected by the Lower 400 Esperanza crosscut in the last days of the year. At the point of intersection the vein is wider than at the Upper 150 level—about two feet—and the sample results show that in places it is just as good grade. The distance along the dip of the vein between the Lower 400 and Upper 150 levels is over 500 feet but until this section is explored by two or more levels and interconnecting raises, it will be impossible to say that it is uniformly ore bearing, particularly as the vein at the sub-level, only 75 feet below the Upper 150, seems to show some diminution in value. The existence of this vein at such depth as the Lower 400 level, however, is highly encouraging and in the coming year it is to be developed at this point and above as quickly as other work permits.

Veins Not Worked:

The veins on which no work was done in 1928 are:

Guadalupe, Nueva, Rosario, Southwest, North, San Vicente, Crisanta and North San Miguel Group.

Upper 150 *Esperanza Crosscut* (*off South Salvador*)

This crosscut, which is off the South Salvador vein, lies about 1,700 feet east of the original Upper 150 Esperanza crosscut. It is projected to more or less follow the apex of the mountain range and its object is exploration of a very large and unknown territory to the south. The distance driven in the past year was 468 feet.

As this crosscut is a very important exploratory project the plan is to drive it continuously in 1929.

Porvenir Adit Crosscut

As stated in last year's report the purpose of this crosscut is exploration for new veins and shortening of the distance between the surface and Esperanza section of the mine by approximately 1,700 feet. This crosscut, which is at the Upper 150 level, is being driven from two points, the total distance advanced in 1928 being 941 feet.

Upper 150 *West Crosscut*

The object of this crosscut is to explore what is known as the Quebrada Honda section of the property and also intersect any branch veins off the Southwest vein. The heading was advanced only 15 feet last year, further work being stopped pending more detailed information of surface conditions.

Lower 650 *Esperanza Crosscut and Raises*

The object of this crosscut was described in detail in the 1927 report. The three raises started from this crosscut, 50 feet apart, and to connect with the Upper 150 Esperanza crosscut, 770 feet vertically above, were driven continuously, at times under considerable difficulty, the total footage made in the three in the past year being 1,038 feet. The ore and the waste raises reached the Zero level in the middle of the year and the third one, hoist and ladderway, should do so in the early part of 1929. Connection with the Zero level improved ventilation greatly and permitted driving of the Lower 200, Lower 300 and Lower 400 Esperanza crosscuts to the Salvador and Independencia veins on these levels. The subsequent development of these veins at these levels is described under their respective headings.

In driving the crosscuts just mentioned a large number of stringers were encountered, some of which are ore bearing and of considerable promise. Owing to more important work there has been no opportunity to explore any of them, but it is expected that in the coming year such work will be started on the more promising ones.

The Lower 650 Esperanza Crosscut was not driven in the past year, work in it being confined to widening it, cutting stations, improving drainage and installing new track.

MINE EQUIPMENT

Air Compressors

The mine air compressor plant rendered satisfactory service throughout the year. Tests show that some of the cylinders may need reboring which work, if required, it is planned to carry out in the Spring. A cooling tower, circulating pump and tanks are being installed so that in the dry season of the year, when creek water is scarce, it will not be necessary to make up the deficiency by using mine water—not always clean —but use the clean water over again. This installation should be completed in the early part of 1929.

Rock Drills

The wet stoping drill was introduced in the early part of the year for use in places where dust in injurious quantities might be created. So far, it has been difficult to get the operators to use this drill as a wet drill, they preferring to operate it dry rather than wet. It is hoped, however, that in the course of time this difficulty will largely disappear. 13 of these machines were purchased in the past year. The operators of the dry machines and others are being supplied with dust respirators free of charge.

Steel Sharpening

The charcoal gas producer and furnace of which mention was made in last year's report was installed in the latter part of the year. This equipment is proving very successful from two standpoints: First—Owing to the possibility of heat control a better forged and tempered bit is obtained; second—charcoal consumption is estimated at 45% less when compared with the open charcoal forges and furnaces formerly used.

Electric Haulage

The Lower 650 electric haulage was called upon to do more work than for some years past, particularly since June when all ore and waste from the lower Esperanza section of the mine commenced to be handled by this haulage. Traffic over the Upper 150 level electric haulage has diminished in proportion and permitted transfer of some of the equipment to the Lower 650 haulage.

Both haulage systems are in need of general repairs, particularly the track. The equipment of the two haulages consists of the following:

	Upper 150 Level	Lower 650 Level
Track, 24 in. gauge, 35 lb. rails, approximately	27,000 ft.	14,500 ft.
Locomotives, trolley type, 250 volts, D. C.	2 5-ton	2 7-ton
	1 6½-ton	1 6½-ton
Number of cars, 25 cu. ft. capacity, trucks, etc.	72	64

THE MILL

Tonnage Crushed

	1928	1927
Total wet tons received	124,601.48	122,178.93
Average per cent moisture	11.249	11.284
Total dry tons milled	110,600	108,400
Average tons per day milled (365 days)	303	297
Average tons per day milled, full running time (308.092)	359	342
Average tons per day milled, per 1850 lbs. stamp	18.0	17.1
Number of 1850 lb. stamp	20	20
Total tons treated by present mill, to December 31, 1928	1,698,408	1,587,808

Recovery

	1928	1927
Average ounces silver received per ton	22.323	21.690
Total ounces silver received	2,468,924	2,351,196
Average ounces silver recovered per ton	20.625	20.039
Total ounces silver recovered	2,287,031	2,172,753
Average silver recovered, per cent.	92.390	92.390
Average ounces gold received per ton	.081	.0546
Total ounces gold received	8,959	5,918
Total ounces gold recovered per ton	.0768	.0516
Total ounces gold recovered	8,500	5,684
Average gold recovery, per cent	94.810	94.510

Supplies Used

	1928	1927	1928	1927
			Per oz. fine bullion produced Grade of Ore	
	Per ton of ore crushed		Ag. 22.323	Ag. 21.690
	110,600 Tonnage	108,400	Au. .081	Au. .0546
Cyanide (100% K.C.N.)	3.82604 lbs.	4.2627 lbs.	.1843413 lbs.	.21218 lbs.
Zinc Dust	0.7552079 "	.9850 "	.0363864 "	.04902059 "
Muriatic Acid	0.0555877 "	.049 "	.0026783 "	.0024502 "
Lime (100%)	9.009 "	12.279 "	.434098 "	.6110628 "
Borax	0.02477 "	.028 "	.0011936 "	.0014005 "
Soda	0.011709 "	.013 "	.0005641 "	.00065203 "
Fuel Oil	0.02564 "	.040 gals.	.0012354 gals.	.0019827 gals.
Artificial Pebbles	49.18264 "	43.262 lbs.	2.36965 lbs.	2.153642 lbs.
Foreign Pebbles	0.7470162 "	1.832 "	.035992 "	.091198 "
Sulphur	2.738408 "	3.049 "	.131938 "	.151793 "

ORE ANALYSIS

	1928	1927	1926	1925
Silica (SiO_2)	74.15%	73.63%	75.61%	72.98%
Alumina (Al_2O_3)	13.57%	11.17%	3.94%	3.72%
Iron (metallic)	3.45%	2.96%	3.47%	3.12%
Manganese	0.83%	0.74%	0.97%	0.72%
Lime (CaO)	0.57%	0.57%	0.57%	0.60%
Magnesia (MgO)	0.49%	0.77%	1.08%	1.37%
Zinc	0.50%	0.46%	0.87%	1.38%
Antimony	Trace	0.06%	0.016%	Trace
Arsenic	0.04%	0.03%	0.01%	Trace
Lead	0.29%	0.22%	0.17%	0.19%
Sulphur	1.25%	1.12%	1.56%	1.33%

Recovery

The recovery of Silver and of Gold in 1928, 92.39% and 94.81% respectively, is substantially the same as in the year previous. Owing to the changing character of the ore and probability of larger tonnage being milled it is possible that there will be a slight decrease in silver recovery during 1929. This decrease could be offset by the addition of two agitation tanks which are to be installed if the changes noted are of a permanent character.

Recovery Detail

	1928				1927			
	Hrs.	Min.	Ag.%	Au.%	Hrs.	Min.	Ag.%	Au.%
Extraction by Crushing Solution	9	00	27.03	75.43	9	00	33.85	78.39
Extraction by Agitation	88	25	65.73	19.51	87	30	58.78	16.30
Extraction in Slime Presses	1	05	.13	.25	1	05	.22	.36
	98	30	92.89	95.19	97	35	92.85	95.05
Less Dissolved Value Loss			.50	.38			.46	.54
Recovery			92.39	94.81			92.39	94.51
Per cent sand not passing 150 mesh			18.08				19.25	

Cyanide Recovery Process

This process operated more efficiently in 1928 than in the year previous, sulphur consumption for an equal quantity of cyanide recovered being about 10% less. Experiments having indicated that a third dispersing tower is necessary, this is to be installed as quickly as possible.

The item of greatest expense is that of sulphur, which is imported from the United States. In the past year investigation of pyritic deposits in the Mine and vicinity failed to disclose any suitable for the production of sulphur dioxide.

Mill Repairs

Excepting for a 9 months' shutdown in 1921 the present Mill & Cyanide Plant has been in continuous operation since 1912, having in that period treated 1,698,408 dry tons. In recent years repairs and replacements have increased and while so far it has been possible to take care of these fairly promptly, additional repair jobs and replacements have come up which may necessitate either a partial or complete suspension of the plant for several weeks. Besides repairs in the Mill heavy replacements and repairs are necessary to the wooden canal which conveys the Mill tailings to the river.

POWER

Rainfall

	1928	1927	1926
Total Rain, Inches	70.24	61.43	48.78
Number Rainy Days	211	197	134
Greatest Monthly Rainfall	19.62 (June)	10.54 (June)	10.69 (Sept.)
Lowest Monthly Rainfall	1.11 (March)	.58 (Feb.)	.09 (Apr.)
Greatest Single Rainfall	3.06 (June)	2.77 (Oct.)	1.53 (Aug.)

HYDRO-ELECTRIC PLANTS

San Juancito Plant

Static Head .....1,357 feet.
Penstock .....4,739 feet of 20", 17" and 14" pipe.
Equipment .....2—450 KVA, 6,600 volts, 60 cycles, A. C. Generators, each coupled directly to 700 H.P. Pelton Wheel.
Flume Lines .....The Escobales and Aguacatal; built of wood, total length 17,000 feet.

Guadalupe Plant

Static Head .....502 feet.
Penstock .....2,350 feet of 30" and 26" electric welded pipe.
Equipment .....2—350 KVA, 6,600 volts, 60 cycles, A. C. Generators, each directly connected to a 550 H.P. Pelton wheel.
Flume Lines .....The Guadalupe, 6,000 feet in length, of wood.

POWER DISTRIBUTION

	1928		1927	
	Kilowatt Hours	K.W.Hours Per Ton	Kilowatt Hours	K.W.Hours Per Ton
Mine Power	3,083,510	27.880	2,512,530	23.178
Electric Haulage	362,800	3.280	258,000	2.380
Mine Lights	18,210	.164	18,000	.166
Mill Power	3,571,480	32.292	3,849,470	35.512
Mill Lights	24,000	.217	24,000	.221
Surface Lights	25,300	.229	24,000	.222
Surface Power	100,000	.904	83,000	.766
Machine Shop	24,200	.219	24,000	.221
Laboratory	6,000	.054	6,000	.055
Totals	7,215,500	65.239	6,799,000	62.721

Power Production by

San Juancito Plant	63.50%	62.52%
Guadalupe Plant	36.50%	37.48%

COST OF POWER PRODUCTION

	1928			1927		
	Amount	Per Ton	K.W.Hr.	Amount	Per Ton	K.W.Hr.
Labor	$9,780.46	.0884	.001356	$13,074.51	.12061	.001923
Supplies	2,901.54	.0262	.000402	3,188.55	.02942	.000469
Total	$12,682.00	.1146	.001758	$16,263.06	.15003	.002392

Based on Horsepower Generated

	1928	1927
Horsepower Hours	9,672,252	9,113,941
Cost per Horsepower Hour	$ 0.001311	$ 0.001785
Cost per Horsepower Year	$ 11.5158	$ 15.6366
Cost per Horsepower Year, Decrease	$ 4.12	

Rainfall

There were unusually heavy rains in the past year, particularly in June, when it rained 19.62 inches, the highest on record for any month. Considerable damage occurred to roads and flumes, which however was repaired without much delay to operations.

Guadalupe Power Plant

Installation of the 30 inch and 26 inch diameter penstock was accomplished in less than two month's actual working time. Two new water wheels of the latest type and of larger

capacity were also installed and coupled to the two existing 350 KVA generators. The new equipment is working satisfactorily in every way and owing to its greater capacity and efficiency will make itself particularly felt in the dry season when water is scarce.

San Juancito Power Plant

This plant continued to render satisfactory service throughout the year.

Transmission Lines

The advisability of replacing the present wooden transmission towers and poles by ones of steel is being looked into. Specifications have been submitted and proposals received which indicate that based over a period of years it would pay to install steel poles and towers. The approximate length of the transmission lines is 26,000 feet.

Flume Lines

Outside of bare maintenance it was impossible in the past year to do anything effective towards replacing the 23,200 feet of wooden flume lines serving the two power plants. A few years ago the advisability of replacing the more important flumes by metal ones was considered, but not gone into further owing to the high cost. The intention is to look into this question again in the coming year, as upkeep cost of the present flumes is becoming excessive.

Electric Shop

Early in February a loaded ore train at the Lower 650 Level electric haulage got out of control and crashed into the electric shop setting this on fire and destroying it. The death, caused by a falling crane, of Mr. O. H. Hering, a young mining engineer of promise who was helping to put out the fire, is very regretfully reported.

A new electric shop has been built and equipped. The manually operated telephone central equipment of some 100 'phones capacity, which was damaged beyond repair, is being replaced by an automatic system which should pay for itself in a few years.

OTHER DEPARTMENTS

Mechanical Department

In addition to taking care of the current work, it also devolved upon the Mechanical Department to install the new Guadalupe penstock and water power units. This installation was done in record time and without the calling in of outside help of any kind, excepting that of labor for the heavy work. A large saving in transportation and other costs was made by purchasing the penstock in rolled sheets and then welding these electrically at the site.

The foundry was operated throughout the year and continued to be not only of great convenience but effects an important saving in the manufacture of wearing parts for the tube mills, batteries and other mill machinery.

Medical Department

	1928	1927
Cost of maintenance	$ 5,632.96	$ 5,855.25
Total consultations, examinations and treatments	11,539	9,177

Assay Office and Laboratory

	1928	1927
Total number of assays run	25,110	25,180
Average number of assays per day	69	69
Total Cost	$ 5,968.52	$ 5,956.17
Cost per assay	0.24	0.24

Hotel

	1928	1927
Total number of meals served	29,464	29,629
Total Cost	$15,510.82	$16,548.83
Cost per meal	$ 0.53	$ 0.56

Roads

	1928	1927
Total maintenance	$ 5,526.72	$ 7,842.47
Decrease	$ 2,315.75	

Schools

Average daily attendance during year:

	1928	1927
Boys' School	127	122
Girls' School	139	127
Total expense	$ 8,544.38	$ 8,783.70

Police and Garrison

	1928	1927
Total maintenance expense	$10,562.77	$ 9,543.59
Increase	$ 1,019.18	

Agencies

	1928	1927
Total expense	$ 4,036.73	$ 4,351.85
Decrease	$ 315.12	

EXPANSION

Several mining zones were examined during the year but none warranted consideration on the part of the Company, at the present time at least. The properties on which work was done during the past year are the following:

Santa Rita

Development and prospecting work continued up to about the middle of the year when, upon it being determined fairly conclusively, that the values existing at or near the surface did not continue to depth it was decided to discontinue further work and return the property to the owners. Besides prospecting work such as trenching, etc., there were driven 474.5 feet of drifts and 132 feet of crosscuts. The amount expended on this property in 1928 was $3,804.26.

California
Department of Olancho

This prospect, which consists of about 100 hectares, was put up at auction for non-payment of taxes and purchased by the Company. Subsequent examination disclosed that reports about it are grossly exaggerated and that no work is warranted thereon, at the present time at least. The amount expended on this property was $754.08 which includes the purchase price.

Aurora-Santa Elena-San Martin, Etc.
(Santa Lucía District)

In the 1927 Annual Report the work which was being done on these zones was described in detail. Recovery of the principal old workings of the San Martin vein was concluded in the early part of the year and a little development on the vein done. It was found that all ore above the water level had been mined many years ago and the vein even gouged below it. Owing to the necessity of sinking a wet shaft and handling water thereafter, which present prospects of the vein do not warrant, all work was stopped.

65 feet were driven on the Zopilotera vein at the main level but as it continued barren this work was stopped. The winze was sunk to a depth of about 75 feet, the vein width and values continuing more or less the same as at the level. Work was stopped in the winze owing to inability to handle the water

with the prospecting equipment. In last year's report it was mentioned that the Zopilotera contains a limited orebody averaging 2.3 feet in width, assaying 36 ounces silver and .06 ounce gold. As it would not pay the Company to exploit this ore for its own account efforts will be made to get a leaser interested who will mine the ore, sort it to a higher grade and ship it to the Rosario Mill, about 12 miles distant, for treatment.

Considerable time was spent mapping some of the zones in an effort to correlate some of the principal veins. This work has not been concluded. The expenditures in the past year were $5,280.21. No work on these zones is contemplated in the coming year.

CONCLUSION

Impoverishment along the upper sections and ends of some of the principal orebodies, which condition was mentioned in the 1927 report, made it imperative, in the past year, to expedite and increase development and exploration of the lower sections of these orebodies so there be no shortage of better grade ore and consequent material drop in the year's value production. That such work responded favorably is indicated by the 1928 production which, compared with that of 1927, is 108,892 ounces silver and 2,891 ounces gold greater, the ore reserves, notwithstanding the 1928 production, being only slightly less in value than those of a year ago.

While no new veins holding out large ore possibilities were found in the past year, work at greater depth in several discovered by the Esperanza Crosscut in previous years indicates that one or two may develop into important ore producers.

Attention is called to the increasing need of general repairs and replacements to equipment. Much has already been done in that direction, as renovation of the two power plants, but much still remains.

This opportunity is taken to draw your attention to the faithful service rendered by the Staff throughout the year and to express appreciation and thanks to you and the gentlemen of the Board for the full confidence and support received in the year past.

Respectfully submitted,

A. R. GORDON,
General Manager.

Annex "A"

Summary of Calculated Ore Reserves
(At 13 cu. ft. per ton)

VEINS	Av. Width Ft.	Per Cent Waste	Tons of Ore & Waste	Ozs. Ag. per Ton	Ozs. Au. per Ton	Total Ozs. Ag.	Total Ozs. Au.
Carmen	1.8	50	14,500	30	.04	435,000	580
Culebra	1.7	35	15,500	16	.05	248,000	775
Fortuna Group	1.8	40	14,100	16	.04	225,600	564
Independencia Group	2.0	43	45,000	27	.09	1,215,000	4,050
Salvador	2.2	42	48,400	21	.05	1,016,400	2,420
San Benito	1.1	56	8,900	30	.25	267,000	2,220
San Joaquin	1.0	60	9,500	15	.12	142,500	1,140
San Luis	1.8	40	3,200	22	.06	70,400	192
Santa Gertrudis	1.0	70	7,000	22	.03	154,000	210
Santa Fe	3.5	30	9,000	22	.07	198,000	630
North San Miguel	1.6	35	4,800	15	.06	72,000	288
South San Miguel Group	1.4	40	25,000	17	.06	425,000	1,500
Southwest	1.5	40	8,000	18	.04	144,000	320
Totals			212,900	21.67	.069	4,612,900	14,889

Summary of Estimated Ore Reserves
(At 13 cu. ft. per ton)

Buenaventura	1,500	12	.06	18,000	90
Candelaria Group	5,000	12	.06	60,000	300
Capitana	3,000	10	.13	30,000	390
Catalina	3,000	14	.05	42,000	150
Colonia	2,000	14	.07	28,000	140
Esperanza	1,500	15	.05	22,500	75
Guadalupe	1,000	12	.03	12,000	30
Jucuara	2,000	12	.05	24,000	100
North	1,000	14	.05	14,000	50
North West	2,000	14	.05	28,000	100
Nueva	1,500	12	.05	18,000	75
Porvenir	2,000	13	.05	26,000	100
Rosario	5,000	12	.06	60,000	300
Socorro	1,500	14	.05	21,000	75
West	2,000	13	.03	26,000	60
Totals	34,000	12.63	.0598	429,500	2,035

Summary of Estimated Stope Filling
(At 17 cu. ft. per ton)

Candelaria	3,000	10	.04	30,000	120
Guadalupe	2,000	10	.03	20,000	60
Rosario	2,500	10	.04	25,000	100
West	1,500	10	.03	15,000	45
Buenaventura	1,000	10	.04	10,000	30
Totals	10,000	10	.035	100,000	355

Summary of Broken Ore in Stopes
(At 21 cu. ft. per ton)

Total	17,707	24.89	.099	440,727	1,758

Total Summary

Calculated Ore, at 13 cu. ft.	212,900	21.67	.069	4,612,900	14,889
Estimated Ore, at 13 cu. ft.	34,000	12.63	.059	429,420	2,006
Estimated Stope Filling, at 17 cu. ft.	10,000	10.00	.035	100,000	355
Broken Ore in Stope, at 21 cu. ft.	17,707	24.89	.099	440.727	1,753
Total	274,607	20.33	.069	5,583,047	19,003

Annex "B"

BROKEN ORE IN STOPES

(At 21 cu. ft. per ton)

Total by Veins

VEINS	TONS
Buena Ventura	250
Candelaria	1,260
Colonia	520
Culebra	450
Fortuna Group	1,522
Independencia	4,688
Northwest	575
Rosario	1,904
Salvador Group	5,175
San Blas	257
South San Miguel Group	1,076
Santa Fe	30
Total	17,707

Annex "C"

Exploration and Development for the Year 1928

Location	Drifts	Cross-cuts	Raises	Winzes	Total Feet
Candelaria	314.5	...	...	...	314.5
Capitana	93.0	158.5	50.0	...	301.5
Carmen	44.5	172.0	...	...	216.5
Colonia	46.0	...	30.0	...	76.0
Culebra	373.5	12.0	281.0	...	666.5
Esperanza Cross-cut 150U (off Salvador)	...	468.0	...	...	468.0
Esperanza Cross-cut—					
Zero	...	299.0	...	132.0	431.0
L-200	30.0	931.0	...	...	961.0
L-300	30.0	1,160.5	...	...	1,190.5
L-400	2.0	1,199.5	...	10.0	1,211.5
L-500	...	66.5	...	...	66.5
L-650	25.0	34.5	...	...	59.5
Esperanza Raise—					
No. 1	...	...	384.5	...	384.5
No. 2	...	...	201.0	...	201.0
No. 3	...	...	452.5	...	452.5
No. 4	...	...	27.0	...	27.0
Fortuna Group	1,877.0	230.5	466.5	...	2,574.0
Guadalupe	229.00	...	...	...	229.0
Independencia Group	2,228.5	592.0	846.0	12.0	3,678.5
Jucuara	36.5	377.0	...	...	413.5
North	...	...	23.5	...	23.5
Northwest	447.0	17.0	...	...	464.0
Porvenir	...	941.0	54.0	...	995.0
Salvador Group	2,537.5	477.0	704.0	...	3,718.5
San Benito	188.0	...	57.0	66.0	311.0
San Blas	125.0	24.0	156.0	...	305.0
San Joaquin	16.0	210.0	...	...	226.0
South San Miguel Group	559.0	35.5	68.0	...	662.5
San Luis	56.0	...	...	...	56.0
Santa Fe	169.5	...	20.0	...	189.5
Santa Gertrudis	254.0	...	11.0	...	265.0
Socorro	...	48.5	37.0	...	85.5
Termopilas	24.5	38.0	68.0	...	130.5
West	69.0	15.0	...	29.5	113.5
Totals	9,775.0	7,507.0	3,937.0	249.5	21,468.5
Cutoffs	...	678.5	...	...	678.5
GRAND TOTAL	...	...	...	...	22,147.0

Annual Report **January 1, 1929**

Annex "D" **ORE PRODUCTION** **Dry Tons**

From Stoping Operations—

Veins	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Buena Ventura	....	....	....	....	116	171	84	....	....	....	....	....	371
Candelaria	....	....	....	....	....	....	63	220	285	301	165	68	1,102
Catalina	102	151	58	446	283	67	....	....	....	....	....	....	1,107
Colonia	230	299	310	256	131	111	142	122	165	345	177	33	2,321
Culebra	542	375	788	592	256	255	230	153	402	276	509	252	4,630
Fortuna Group	2,910	2,395	1,670	1,321	2,178	2,293	1,922	1,435	1,428	1,434	982	1,300	21,268
Independencia	751	845	729	228	383	732	1,244	1,805	2,446	3,023	3,706	4,268	20,160
Jucuara	....	....	....	....	....	....	5	....	....	....	....	....	5
Northwest	116	265	391	261	443	386	461	470	535	922	825	473	5,548
Salvador Group	1,984	1,844	2,463	2,559	2,410	2,463	2,207	3,102	1,728	1,699	1,725	2,040	26,224
San Benito	93	120	131	138	135	63	....	....	30	200	263	306	1,479
San Blas	143	144	155	39	120	181	432	168	464	125	96	132	2,199
South San Miguel Group	512	511	419	369	909	969	481	543	446	741	395	435	6,730
Santa Gertrudis	551	257	54	....	....	12	196	148	165	29	295	234	1,941
Socorro	68	170	88	105	....	....	....	....	....	....	....	....	431
West	....	....	....	....	9	44	56	21	32	....	4	22	188
Totals	8,002	7,376	7,256	6,314	7,373	7,747	7,523	8,187	8,126	9,095	9,142	9,563	95,704

From Development Excavations—

Candelaria	....	....	....	....	....	....	220	41	126	10	....	....	397
Culebra	20	27	....	....	....	....	35	30	59	16	....	....	187
Fortuna Group	230	286	30	....	70	39	99	247	305	48	37	17	1,408
Independencia	62	484	829	607	638	566	253	817	654	790	550	754	7,004
Northwest	237	157	12	....	8	113	35	35	30	....	....	....	627
Porvenir	46	....	....	....	....	....	....	....	....	....	....	....	46
Salvador Group	283	273	392	66	235	616	650	145	347	203	225	99	3,534
San Benito	28	14	12	....	....	....	77	42	95	....	42	....	310
San Blas	....	....	15	92	59	13	....	....	....	....	....	....	179
Santa Fe	....	....	....	....	....	....	....	....	....	....	220	408	628
South San Miguel Group	57	79	37	67	101	80	15	....	....	....	....	....	436
West	....	....	....	....	....	....	....	....	13	50	26	....	89
Totals	963	1,320	1,327	832	1,111	1,427	1,384	1,357	1,629	1,117	1,100	1,278	14,845
GRAND TOTAL	8,965	8,696	8,583	7,146	8,484	9,174	8,907	9,544	9,755	10,212	10,242	10,841	110,549

Annex "E"

TONNAGE MINED

From October 1, 1907, to January 1, 1929

Veins	Total including Stoping, Devel. & Filling Oct. 1, 1907 to Dec. 31, 1927	Total including Stoping, Devel. & Filling Year 1928	Grand Total including Stoping, Devel. & Filling January 1, 1929
Buena Ventura	98,119	371	98,490
Candelaria Group	165,074	1,499	166,573
Capitana	54,268	....	54,268
Carmen	17,526	....	17,526
Catalina	5,480	1,107	6,587
Colonia	54,035	2,321	56,356
Concepción	19,170	....	19,170
Crisanta	7,410	....	7,410
Culebra	94,053	4,817	98,870
Esperanza	8,710	....	8,710
Fortuna Group	41,652	22,676	64,328
Guadalupe	61,177	....	61,177
Independencia	59,079	27,164	86,243
Jucuara	2,207	5	2,212
North	4,647	....	4,647
Northwest	82,382	6,175	88,557
Nueva	28,147	....	28,147
Porvenir	1,478	46	1,501
Rosario	150,915	....	150,915
Salvador Group	214,141	29,758	243,899
San Benito	4,281	1,789	6,070
San Blas	2,351	2,378	4,729
San Joaquin	63,030	....	63,030
San Luis	922	....	922
San Miguel North	174,801	....	174,801
S. San Miguel Group	107,582	7,166	114,748
Santa Fé	50	628	678
Santa Gertrudis	26,818	1,941	28,759
Socorro	20,969	431	21,400
Southwest	20,509	....	20,509
Termopilas	6,094	....	1,094
West	96,533	277	96,833
Ore from Development	63,599	....	63,599
Miscellaneous	1,573	....	1,573

Summary

October 1st, 1907, to January 1, 1929

From Stoping	1,488,068
From Development	142,863
From Fills	233,400
Total	1,864,331 tons

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NEW YORK AND HONDURAS ROSARIO MINING COMPANY

Annual Report

for the Year Ended December 31, 1928

submitted by

President Lewis L. Clarke

at the

Annual Meeting of the Stockholders

April 3, 1929

New York, April 3, 1929.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

It is my pleasure to report to you that the year 1928 has proved to be one of the most satisfactory in the history of the Company. Our production showed a gratifying improvement. Ounces of silver recovered were 2,275,103, as compared with 2,165,225 in 1927. Ounces of gold were 8,510, compared with 5,584 in 1927, and the cost of this production was reduced below the cost of 1927, as explained in a statement which follows.

Dividends to the amount of $450,000.00 were paid during 1928, or an increase of $50,000.00 over the amount paid in 1927.

I wish also to direct attention to the fact that, of the Miscellaneous Income for the year 1928, $140,042.41 was derived from other than mining operations, and represents 20.8% of the total income of $673,962.60.

In accordance with custom, I am presenting with this report financial tables which give a complete picture of the Company's status. I desire to explain that these figures are not the result of a final audit, for the reason that we are not in possession of the adjusted closing figures from our office in Honduras. The delay in receiving these statistics was caused by a fire on January 17th, 1929, which destroyed our office building at San Juancito with the loss of most of our records. New records have been assembled, and the final reports are now on their way to New York. The figures presented in this report, we are assured by our auditors, are so close an approximation to those which will be finally submitted, that there will be only minor differences between them and those of the definite report which will be published as soon as possible.

The following statement presents the essential facts explaining the quantity and value of our production for the years 1928 and 1927, and also the costs and profits on the basis of ounces and tons produced:

	Year 1928	Year 1927	Increase Decrease
Total Sales Value of Gold and Silver Recovered	$1,500,233.98	$1,341,300.06	$158,933.92
Tons of Ore Milled	110,600	108,400	2,200
Ounces of Silver Recovered	2,275,103.100	2,165,225.536	109,877.564
Number of Ounces of Silver Recovered per Ton of Ore	20.5705	19.9744	.5961
Ounces of Gold Recovered	8,510.759	5,584.233	2,926.526
Sales Value of Silver Recovered	$1,324,316.61	$1,225,874.06	$ 98,442.55
Average Sales Value of Silver per Ounce	$ .5821	$ .5662	$ .0159
Average Cost of Silver per Ounce	$ .3588	$ .4029	$ *.0441
Average Profit on Silver per Ounce	$ .2233	$ .1633	$ .0600
Total Sales Value of Gold Recovered	$ 175,917.37	$ 115,426.00	$ 60,491.37
Value of Gold per Ounce	$ 20.67	$ 20.67	$ .....
Value of Silver Recovered per Ton of Ore	$ 11.9739	$ 11.3088	$ .6651
Average Cost of Silver per Ton of Ore	$ 7.3808	$ 8.0469	$ *.6661
Average Profit on Silver Recovered per Ton of Ore	$ 4.5931	$ 3.2619	$ 1.3312
Value of Gold Recovered per Ton of Ore	$ 1.5905	$ 1.0648	$ .5257
Number of Bars of Bullion Shipped from Mine	1,362	1,297	65

* Decrease.

Income and Profit and Loss Statement
New York & Honduras Rosario Mining Company
New York City
For the Year Ended December 31, 1928

Production of Gold and Silver		$1,500,233.98	
Less: Freight and Expenses on Bullion		57,946.67	
Operating Income			$1,442,287.31
Deduct: Operating Expenses			867,906.61
Operating Profit			$ 574,380.70
Deduct: New York Administrative Expenses			66,387.94
Net Profit from Operations			$ 507,992.76
Miscellaneous Income			165,969.84
			$ 673,962.60
Other Deductions			40,886.08
Net Profit Before Federal Income Tax and Provision for Reserves			633,076.52
Federal Income Tax			36,060.33
Net Profit for Year			$ 597,016.19
Appropriated for Reserves from Earnings—			
Depletion (Based upon Valuation of Mine at March 1, 1913)	$ 14,137.54		
Fire Insurance	8,114.24		
Transit Insurance	4,101.23		26,353.01
Profit for the Year Carried to Surplus			570,663.18
Surplus—			
Surplus, January 1, 1928		$1,984,303.73	
Addition—			
Adjustment of 1928 Depletion Charges		628.08	
		$1,984,931.81	
Deductions—			
Dividends paid and provided	$450,000.00		
Decrease during 1928 in market value of securities owned at December 31, 1928	79,000.62		
Additional Federal Income Tax—1927	1,826.24		
Depletion (on appreciated mine valuation)	14,137.54	544,964.40	1,439,967.41
Surplus—December 31, 1928			$2,010,630.59

NOTE—

— During the year 1927 the United States Government authorized a readjustment of our depletion account due to certain new discoveries. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Entries recording depletion on the new discoveries will be made in a supplementary memorandum ledger account wherein is set up the values allowed by the Treasury Department and showing the actual depletion sustained and allowable for each year. These depletion entries are made for income tax purposes only.

Condenesd Balance Sheet
New York & Honduras Rosario Mining Company
New York City
December 31, 1928

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion of Mines	2,107,632.76	$ 892,367.24	
Plant Buildings, Machinery and Equipment	1,533,166.36		
Less: Allowance for Depreciation	1,085,709.46	447,456.90	$1,339,824.14
Current—			
Cash		$ 81,301.48	
Call Loans plus Interest (Secured)		301,391.66	
Bullion at Smelters and in Transit at Market Less Allowance for Expenses		316,758.25	
Broken Ore in Stopes and Mill Bins at Cost		90,005.89	
Materials and Supplies at Book Value Less Allowance for Shrinkage to Estimated Cost		231,827.44	
U. S. Securities at Market plus Interest		362,580.87	
Other Marketable Securities at Market plus Interest		1,377,395.83	2,761,261.42
Other Assets—			
Sundry Accounts Receivable		$ 6,437.96	
Capital Stock of Other Company (Nominal Value)		1.00	6,438.96
Deferred Charges—			
Prepaid Insurance, Taxes and Expenses			261,131.84
TOTAL ASSETS			$4,368,656.36

LIABILITIES

Current—			
Drafts Payable		$ 49,305.23	
Accounts Payable		46,636.97	
Federal Income Tax—1928		36,060.33	$ 132,002.53
Reserves—			
Dividends—Payable January, 1929		$ 100,000.00	
Mine Fire Insurance		71,968.30	
Transit Insurance		25,133.98	
Sabana Grande-Honduras Mining Company Advances		27,921.57	
Property Replacement		999.39	226,023.24
Capital Stock—			
Authorized and Issued—200,000 shares of a Par Value of $10.00 per share		$2,000,000.00	
Surplus			
Earned	$1,413,164.10		
Appreciation of Mine Valuation	$1,500,000.00		
Less Depletion Earned	902,533.51	597,466.49	2,010,630.59	4,010,630.59
			$4,368,656.36

The financial position of the Company at the beginning and at the close of the year 1928 based upon Balance Sheets prepared by the auditors at both dates is set forth in condensed comparative form.

	December 31, 1928	December 31, 1927	Increase Decrease
Current Assets	$2,761,261.42	$2,640,776.75	$ 120,484.67
Current Liabilities	132,002.53	117,830.03	14,172.50
NET CURRENT ASSETS	2,629,258.89	2,522,946.72	106,312.17
Other Assets	6,438.96	14,230.90	*7,791.94
Permanent Assets—Less: Depreciation	447,456.90	473,712.08	*26,255.18
Mines, Real Estate and Concessions—Less: Depletion of Mines	892,367.24	920,014.24	*27,647.00
Deferred Charges	261,131.84	239,306.32	21,825.52
	$4,236,653.83	$4,170,210.26	$ 66,443.57
Represented by:			
Reserve—Insurance	$ 97,102.28	$ 84,886.81	$ 12,215.47
Reserve—Dividends Payable	100,000.00	100,000.00	.....
Reserve—Sabana-Grande Advances	27,921.57	.....	27,921.57
Reserve—Property Replacement	999.39	1,019.72	*20.33
Capital Stock	2,000,000.00	2,000,000.00	.....
Surplus	2,010,630.59	1,984,303.73	26,326.86
	$4,236,653.83	$4,170,210.26	$ 66,443.57
Ratio of Current Assets to Current Liabilities	20.91 to 1	22.41 to 1	*1.50 to 1

* Decrease

Dividends Paid

April, 1928	$100,000.00	
July, 1928	100,000.00	
October, 1928	100,000.00	
December, 1928	50,000.00	
January, 1929	100,000.00	
		$450,000.00

Government of Honduras

In the course of our operations in Honduras, we are required to have frequent business discussions with the Government of Honduras. We desire at this time to express our appreciation of the attitude of the Government and the courtesies shown to us by its representatives. We also renew the expression of our sincere good wishes for the prosperity of the people of Honduras.

LEWIS L. CLARKE,
President.

REPORT of the
NEW YORK & HONDURAS
ROSARIO MINING CO.

1929

NEW YORK

January 1, 1930

OFFICERS 1930-1931

LEWIS L. CLARKE, *President*

H. A. GUESS, *Vice-President*

A. R. GORDON, *Vice-President*

W. C. LANGLEY, *Treasurer*

J. PERLMAN, *Secretary*

BOARD OF DIRECTORS 1930-1931

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY	W. C. LANGLEY
LEWIS L. CLARKE	W. L. SAUNDERS
H. A. GUESS	E. V. SOTO
IRVING HEIDELL	AMBROSE G. TODD
DR. J. RALPH JACOBY	DR. JULIUS J. VALENTINE

P. R. WEILER

EXECUTIVE COMMITTEE 1930-1931

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY	W. L. SAUNDERS
H. A. GUESS	AMBROSE G. TODD

P. R. WEILER

LEWIS L. CLARKE, W. C. LANGLEY } *Ex-Officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company for the Year Ended December 31st, 1929

New York, April 2, 1930.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

This Company's record for the year 1929 is a gratifying one. A year ago I had the pleasure of reporting an increased production compared with the preceding year, and this progress has continued. Ounces of silver recovered were 2,466,095 against 2,275,103 in 1928, or an increase of 190,992 ounces, and ounces of gold 10,245, against 8,510 in 1928, an increase of 1,735 ounces.

Dividends amounting to $500,000 were paid in 1929, or an increase of $50,000 over the amount paid in 1928.

In my report for 1928 I called attention to the considerable percentage of our income which came from other than mining operations, and the figures for 1929 show that the Miscellaneous Income from that source was $124,437.19, or 19.94% of the total income of $624,045.90.

It is proper to call to your attention that the excellent results of last year were achieved despite the fact that the silver market showed a steady decline during that period, the average monthly quotations being 57.019c for January and 48.475c for December. This naturally had an appreciable effect upon our earnings, mitigated to an extent by certain favoring factors, such as the increased production of gold, and reductions in general cost of operations, representing a net reduction in the per ounce cost of silver of 4.78c, compared with the preceding year.

It seems to me only just to you that I should not overlook to direct your attention to the official prices of silver at the end of 1929 and since (March 31, 1930, 42c per oz.)*. The situation is one which cannot fail to give us concern. A search for the causes of the marked decline that has taken place indicates it to be mainly due, as far as authorities can determine, to a more general adoption of the gold standard, a continued demonetization of silver used in fractional currency by European countries, an import tax recently established by India, the extensive selling of silver by that country, the diminution of purchases by China, and the general impairment of the buying power of those peoples who are most directly affected by the reduction in the value of silver. It is my hope that stabilizing influences will assert themselves, and that a more normal situation will develop.

*June 26, 1930—33⅝c per oz.

A very complete picture of the most interesting facts concerning our operations for the years 1928 and 1929 is given below.

	Year 1929	Year 1928	Increase *Decrease
Total Sales Value of Gold and Silver Recovered	$1,477,710.79	$1,500,233.98	*$ 22,523.19
Tons of Ore Milled	113,919.57	110,600.00	3,319.57
Ounces of Silver Recovered	2,466,095.270	2,275,103.100	190,992.170
Number of Ounces of Silver Recovered per Ton of Ore	21.6477	20.5705	1.0772
Ounces of Gold Recovered	10,245.743	8,510.759	1,734.984
Sales Value of Silver Recovered	$1,265,931.29	1,324,316.61	*58,385.32
Average Sales Value of Silver per Ounce	$ .5133	.5821	*.0688
Average Cost of Silver per Ounce	$ .3124	.3602	*.0478
Average Profit on Silver per Ounce	$ .2009	.2219	*.0210
Total Sales Value of Gold Recovered	$ 211,779.50	175,917.37	35,862.13
Value of Gold per Ounce	$ 20.67	20.67	.....
Value of Silver Recovered per Ton of Ore	$ 11.1125	11.9739	*.8614
Average Cost of Silver per Ton of Ore	$ 6.7642	7.4107	*.6465
Average Profit on Silver Recovered per Ton of Ore	$ 4.3483	4.5632	*.2149
Value of Gold Recovered per Ton of Ore	$ 1.8590	1.5905	.2685
Number of Bars of Bullion Shipped from Mine	1,505	1,362	188

* Decrease

Income and Profit and Loss Statement
For the Year Ended December 31, 1929

Production of Gold and Silver			$1,477,710.79	
Less: Freight and Expense on Bullion			62,853.82	
Operating Income				$1,414,856.97
Deduct: Operating Expenses				853,568.35
Operating Profit				561,288.62
Deduct: New York Administrative Expenses				65,929.83
Net Profit from Operations				495,358.79
Other Income				128,687.11
				624,045.90
Other Deductions				19,892.29
Net Profit Before Federal Income Tax and Provision for Reserves				604,153.61
Federal Income Tax				37,296.84
Net Profit for Year				566,856.77
Appropriated for Reserves from Earnings—				
Depletion (Based upon Valuation of Mine at March 1, 1913)		$	7,180.73	
Fire Insurance			8,211.34	
Transit Insurance			4,170.24	19,562.31
Profit for the Year Carried to Surplus				547,294.46
Surplus—				
Surplus January 1, 1929			2,017,946.02	
Additions—				
Adjustment of 1929 Reserve for Property Replacement		$ 999.39		
Deductions—				
Dividends Paid and Provided	$500,000.00			
Decrease during 1929 in market value of Securities owned 12/31/29	54,421.98			
Additional Federal Income Taxes 1927 and 1928	13,592.82			
Depletion (on appreciated mine valuation)	7,180.73	575,195.53	574,196.14	1,443,749.88
Surplus—December 31, 1929				$1,991,044.34

NOTE—

— During the year 1927 the United States Government authorized a readjustment of our depletion account due to certain new discoveries. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Entries recording depletion on the new discoveries will be made in a supplementary memorandum ledger account wherein is set up the values allowed by the Treasury Department and showing the actual depletion sustained and allowable for each year. These depletion entries are made for income tax purposes only.

Condensed Balance Sheet
December 31, 1929

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion of Mines	2,121,995.22	$ 878,004.78	
Plant Buildings, Machinery and Equipment	1,582,733.25		
Less: Allowance for Depreciation	1,164,693.11	418,040.14	$1,296,044.92
Current—			
Cash		38,829.30	
Call Loans plus Interest (Secured)		301,112.50	
Bullion at Smelters and in Transit at Market, Less: Allowance for Expenses		230,725.92	
Broken Ore in Stopes and Mill Bins—at Cost		118,907.82	
Materials and Supplies—at Cost		229,242.57	
U. S. and Other Marketable Securities at Market, plus Interest		1,827,815.97	2,746,634.08
Other Assets—			
Sundry Accounts Receivable		7,270.84	
Capital Stock of Other Company (Nominal Value)		1.00	7,271.84
Deferred Charges—			
Prepaid Insurance, Taxes and Expenses			280,002.42
TOTAL ASSETS			$4,329,953.26

LIABILITIES

Current—			
Drafts Payable		$ 23,510.22	
Accounts Payable		31,978.01	
Federal Income Taxes		43,115.84	$ 98,604.07
Reserves—			
Dividends—Payable January, 1930		100,000.00	
Mine Fire Insurance		80,179.64	
Transit Insurance		29,304.22	
Sabana Grande-Honduras Mining Co. Advances		30,820.99	240,304.85
Capital Stock—			
Authorized and Issued—200,000 shares of a par value of $10.00 per share		2,000,000.00	
Surplus—			
Earned	$1,400,759.08		
Appreciation of Mine Valuation	$1,500,000.00		
Less: Depletion Earned	909,714.74	590,285.26	1,991,044.34	3,991,044.34
			$4,329,953.26

Balance sheets of the Company at December 31, 1929, and December 31, 1928, based on examinations made by the auditors, are compared in condensed form as follows:

	December 31,1929	December 31, 1928	Increase *Decrease
Current Assets	$2,746,634.08	$2,770,416.62	$ *23,782.54
Current Liabilities	98,604.07	133,891.24	*35,287.17
NET CURRENT ASSETS	2,648,030.01	2,636,525.38	11,504.63
Other Assets	7,271.84	6,488.90	782.94
Permanent Assets—Less: Depreciation	418,040.14	447,456.90	*20,416.76
Mines, Real Estate and Concessions Less: Depletion of Mines	878,004.78	892,366.24	*14,361.46
Deferred Charges	280,002.42	261,131.84	18,870.58
	$4,231,349.19	4,243,969.26	*12,620.07
Represented by:			
Reserve—Insurance	109,483.86	97,102,28	12,381.58
Reserve—Dividends Payable	100,000.00	100,000.00	.....
Reserve—Sabana Grande Advances	30,820.99	27,921.57	2,899.42
Reserve—Property Replacement	.....	999.39	*999.39
Capital Stock	2,000,000.00	2,000,000.00	.....
Surplus	1,991,044.34	2,017,946.02	*26,901.68
	$4,231,349.19	4,243,969.26	*12,620.07
Ratio of Current Assets to Current Liabilities	27.85 to 1	20.69 to 1	7.16 to 1

* Decrease

Dividends Paid

April, 1929	$100,000.00	
July, 1929	100,000.00	
October, 1929	100,000.00	
December, 1929	100,000.00	
February, 1930	100,000.00	
		$500,000.00

Auditors' Certificate

WE HEREBY CERTIFY that we examined the books of account and record of NEW YORK & HONDURAS ROSARIO MINING COMPANY, NEW YORK CITY, for the year ended December 31, 1929, and, subject to the fact that we did not examine the records at the mine office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at December 31, 1929, and that the related Income and Profit and Loss Statement is correct.

(Signed) ERNST & ERNST.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
1925	1,763,023.16
1926	1,601,429.35
1927	1,341,300.06
1928	1,500,233.98
1929	1,477,710.79
	$42,111,705.50

Distribution to Stockholders

1887	No. 1	$37,500— 2½% Dividend
1888	Nos. 2 to 5	60,000— 4% Dividend
1889	Nos. 6 to 14	150,000—10% Dividend
1891	Nos. 15 to 16	30,000— 2% Dividend
1892	Nos. 17 to 21	165,000—11% Dividend
1893	Nos. 22 to 25	150,000—10% Dividend
1894	No. 26	37,500— 2½% Dividend
1896	Nos. 27 to 28	30,000— 2% Dividend
1897	Nos. 29 to 40	180,000—12% Dividend
1898	Nos. 41 to 48	120,000— 8% Dividend
1899	Nos. 49 to 60	180,000—12% Dividend
1900	Nos. 61 to 75	225,000—15% Dividend
1901	Nos. 76 to 93	300,000—20% Dividend
1902	Nos. 94 to 100	105,000— 7% Dividend
1903	No. 101	15,000— 1% Dividend
1904	Nos. 102 to 108	105,000— 7% Dividend
1905	Nos. 109 to 121	180,000—12% Dividend
1906	Nos. 122 to 139	285,000—19% Dividend
1907	Nos. 140 to 153	210,000—14% Dividend
1908	Nos. 154 to 165	180,000—12% Dividend
1909	Nos. 166 to 173	120,000— 8% Dividend
1910	Nos. 174 to 180	105,000— 7% Dividend
1911	Nos. 181 to 182	90,000— 6% Dividend
1912	Nos. 183 to 184	70,000— 3½% Dividend
1913	Nos. 185 to 188	180,000— 9% Dividend
1914	Nos. 189 to 193	240,000—12% Dividend
1915	Nos. 194 to 197	240,000—12% Dividend
1916	Nos. 198 to 205	400,000—20% Dividend
1917	Nos. 206 to 211	300,000—15% Dividend
1917	No. 1	100,000— 5% Amortization
1918	Nos. 212 to 215	200,000—10% Dividend
1918	Nos. 2 to 5	200,000—10% Amortization
1919	Nos. 216 to 219	200,000—10% Dividend
1919	Nos. 6 to 9	200,000—10% Amortization
1920	Nos. 220 to 225	320,000—16% Dividend
1920	Nos. 10 to 11	80,000— 4% Amortization
1921	No. 226	60,000— 3% Dividend
1922	Nos. 227 to 229	150,000— 7½% Dividend
1923	Nos. 230 to 234	250,000—12½% Dividend
1924	Nos. 235 to 240	350,000—17½% Dividend
1925	Nos. 241 to 247	350,000—17½% Dividend
1926	Nos. 248 to 255	400,000—20% Dividend
1927	Nos. 256 to 263	400,000—20% Dividend
1928	Nos. 264 to 272	450,000—22½% Dividend
1929	Nos. 273 to 281	500,000—25% Dividend
	Total	$8,700,000

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 281, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00

Comparative Statement of Net Assets

FOR THE YEARS ENDED DECEMBER 31st AS BELOW

CURRENT ASSETS—	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929
Cash and Cash Items	$172,165	$470,377	$283,570	$308,423	$474,620	$ 146,298	$ 184,750	$ 94,999	$ 116,838	$ 382,693	$ 339,942
Marketable Securities	208,800	179,822	408,485	564,611	546,239	1,394,411	1,818,692	1,932,105	1,970,034	1,739,977	1,827,816
Bullion in Transit	805,137	231,770	1,145	142,270	307,157	261,416	263,334	242,857	222,503	316,758	230,726
Ore in Stopes and Mill Bin	95,134	120,978	114,217	91,467	88,245	107,375	77,385	77,665	88,477	90,160	118,908
Materials and Supplies	329,101	403,393	308,464	191,772	210,782	235,033	247,461	286,312	242,925	240,828	229,242
Total Current Assets	$1,610,337	$1,406,340	$1,115,881	$1,298,543	$1,627,043	$2,144,533	$2,591,622	$2,633,938	$2,640,777	$2,770,416	$2,746,634
Deduct: Current Liabilities	522,062	199,069	218,387	218,305	205,153	262,560	278,038	123,768	117,830	133,891	98,604
Net Current Assets	$1,088,275	$1,207,271	$897,494	$1,080,238	$1,421,890	$1,881,973	$2,313,584	$2,510,170	$2,522,947	$2,636,525	$2,648,030
OTHER ASSETS—											
Accounts Receivable, Investments, Deferred Charges, etc.	368,378	144,173	178,546	269,179	312,547	222,260	139,276	150,155	253,536	267,620	287,274
PERMANENT—											
‡Mines, Real Estate, Concessions, Buildings, Machinery, etc. (less Allowances for Depreciation)	2,188,829	2,134,275	2,116,892	2,080,317	2,030,539	2,032,953	2,030,457	2,012,815	1,973,712	1,947,457	1,918,040
*Total Net Assets	$3,645,482	$3,485,719	$3,192,932	$3,429,734	$3,764,976	$4,137,186	$4,483,317	$4,673,140	$4,750,195	$4,851,602	$4,853,344
Increase of Net Current Assets over Preceding Year		$118,996	†$309,777	$182,744	$341,652	$460,083	$431,611	$196,586	$12,777	$113,578	$11,505
Increase of Net Current Assets over December 31, 1919		$118,996	†$190,781	†8,037	$333,615	$793,698	$1,225,309	$1,421,895	$1,434,672	$1,548,250	$1,559,755

* Represented by Capital Stock, Surplus, Reserves for Depletion, Exchange Fluctuation, Contingencies, etc., with no adjustment for increased valuation of mines, etc.

† Decrease.

‡ Not adjusted for increased valuation of mines.

Government of Honduras

On behalf of the Company, it is my pleasure to extend to the Government and people of Honduras our cordial felicitations.

LEWIS L. CLARKE,
President.

Annual Report of the General Manager

January 1, 1930.

TO THE PRESIDENT,
NEW YORK & HONDURAS ROSARIO MINING COMPANY,
17 BATTERY PLACE, NEW YORK, N. Y.

DEAR SIR:

The following is a report on operations on the Company's mining properties in Honduras during the fiscal and calendar year 1929:

Production

	1929	1928
Dry Tons Treated	113,920	110,600
Average per ton—Troy ounces silver	23.624	22.323
Average per ton—Troy ounces gold	.094	.081
Total Troy ounces silver produced	2,476,124	2,287,031
Total Troy ounces gold produced	10,304	8,500
Ratio of silver to gold	240 : 1	269 : 1
Bars Doré Bullion	1,505	1,362
Bullion fineness of silver	977.56	979.83
Bullion fineness of gold	4.07	3.59
Customs ore: included in totals above:		
Silver	3,972.10 ozs.	5,940.80 ozs.
Gold	8.410 "	8.403 "
Obsolete coinage	429.00 " Ag.	

The bullion production in 1929 exceeded that of 1928 by 189,093 ounces silver and 1,804 ounces gold. The higher gold output is largely the result of plans made some years ago to do more intensive mining in gold-bearing sections of the Mine. The gold output obtained in 1929 is 4,942 ounces greater than or nearly double that of the yearly average for the past seven years. The present ore resources indicate that a gold production equal to last year's, or even better, can be expected for some time.

Honduras Operating Costs

Operating Basis:	1929	1928
Dry tons milled	113,920	110,600
Troy ounces silver produced	2,471,723	2,281,090
Troy ounces gold produced	10,296	8,492
Total Troy ounces bullion produced	2,482,019	2,289,582
Feet exploration and development driven	25,325	22,147

	Total Costs		Per Ton		Per Troy Ounce Fine Bullion Produced	
Mine	1929	1928	1929	1928	1929	1928
Labor	$267,856.06	$288,157.65	$2.35	$2.61	$.1079	$.1259
Supplies	157,751.97	162,277.78	1.39	1.47	.0636	.0709
Power	7,383.71	6,044.40	.06	.05	.0030	.0026
Totals	$432,991.74	$456,479.83	$3.80	$4.13	$.1745	$.1994
Mill						
Labor	$ 55,973.11	$ 51,222.92	$ .49	$ .46	$.0226	$.0224
Supplies	156,234.97	142,523.77	1.37	1.29	.0629	.0622
Power	5,977.64	6,362.79	.05	.06	.0024	.0028
Totals	$218,185.72	$200,109.48	$1.91	$1.81	$.0879	$.0874
Honduras Administration	$141,285.25	$127,720.73	$1.24	$1.15	$.0569	$.0558
Totals	$792,462.71	$784,310.04	$6.95	$7.09	$.3193	$.3426
Credit value of gold produced	$212,612.40	$175,359.80	$1.87	$1.59	$.0857	$.0759
Net cost of silver	$579,850.31	$608,950.24	$5.08	$5.50	$.2336	$.2667
Cost per Troy ounce silver produced	$.2336	$.2667				

The above comparative statement indicates that in 1929, 3,320 tons more were milled, 192,437 ounces more bullion produced, and 3,178 feet, or 14.3% more exploration and development driven at a reduction of $.42 per ton and $.0331 per Troy ounce Fine Bullion Produced.

THE MINE

Ore Reserves

Annex "A" lists the different classes of ore reserves by veins, of which the following is a summary:

Summary

	Tons of Ore and Waste	Ozs. Ag. Per Ton	Ozs. Au. Per Ton	Total Ozs. Ag.	Total Ozs. Au.
Calculated Ore, at 13 cu. ft.	298,000	28.41	.1512	8,467,700	45,059
Estimated Ore, at 13 cu. ft.	34,000	12.63	.0598	429,500	2,035
Broken Ore in Stopes, at 21 cu. ft.	26,530	24.43	.1000	648,128	2,653
Total Reserve as of Jan. 1, 1930..	358,530	26.62	.1387	9,545,328	49,747

Comparing the ore reserves herewith presented with those of January 1, 1929, an increase of 83,923 tons, 3,962,281 ounces silver and 30,744 ounces of gold will be noted. This marked increase in the course of only one year, during which were mined 114,302 tons of ore having a gross content of 2,686,845 ounces silver and 10,712 ounces gold, indicates that development of ore already existing in the prospective stage and the exploration of new veins found in years past have responded most favorably. As indicated further on in this report, development footage was the highest on record, this being made possible by preparatory work underground extending over nearly a four-year period.

The reserves of the Salvador-Fortuna-Carmen and Independencia Groups, as per Annex "A," do not include prospective ore, estimated at more than 400,000 tons, part of which will make up the 1930 production.

The Estimated Stope Filling Reserve, which it has been customary to report in the past, is not included in this year's reserve figures. About 10,000 tons, estimated at 10.00 ozs. Ag. and .035 oz. Au. per ton remain. This small quantity is so widely scattered over the old workings of the Mine and its value at present silver prices is so low that it could only be mined at a loss.

In the Estimated Ore Reserve there will be noted per ton values which at the present time are too low to yield a profit or even pay expenses. Report of these reserves is made, nevertheless, as the circumstances are such that in the course of mining there are chances of this ore becoming better.

ORE PRODUCTION

The quantity of ore produced in 1929 by each vein is shown in Annexes "C" and "D," of which the following is a comparative summary:

	1929	1928
By Stoping	73,305 tons	95,704 tons
From Development Excavations	40,997 tons	14,845 tons
Total	114,302 tons	110,549 tons
Number of Producing Veins	17	19

The Esperanza section produced 100,833 tons, or 88.51% of the total tonnage milled, as compared with 84,393 tons or 76.40% in 1928. Also, 36% of the ore came from development excavations, compared with 13% in 1928

The distribution of labor in the Mine Department for the past three years is shown in the following table. Besides the underground force there is also included the force serving the drill and blacksmith shops, compressor stations, etc., located at the various mine portals.

	1929	1928	1927
Day shifts	307	308	309
Average number of men per day shift	399	470	515
Night shifts	303	302	230
Average number of men per night shift	108	69	40
Total man shifts	155,217	165,598	168,217

Though in 1929 a greater tonnage was mined and considerably more development footage driven than in the two preceding years, the above table shows this was accomplished at an appreciable decrease in man shifts, due principally to better operating conditions created by the systematic opening up of the Esperanza section.

The problem of much needed ventilation in the Esperanza section was satisfactorily solved in the past year by connection of the three principal raises, each 780 feet high, between the Lower 650 and the Upper 150 levels, and connection with the surface through the Upper 800 Salvador workings. Additional surface connections for ventilation are being driven in anticipation of the time when they will be needed.

Exploration, Development and Mining

The footage driven in each vein is given in Annex "C" of which the following is a summary:

Year	Drifts	Crosscuts	Raises	Winzes	Misc.	Total
1929	13,004.0	5,811.5	6,113.5	112.0	284.0	25,325.0
1928	9,775.0	7,507.0	3,937.0	249.5	678.5	22,147.0

The preparatory program, started about four years ago and described in previous reports, to make the very extensive Esperanza section of the mine more economically accessible for mining on a large scale, reached its most important objectives in the early part of the year. The principal veins of this section were in-

tersected at various new levels at more or less the same time which, giving at once a large field for development, resulted in the largest ore production on record, particularly from development excavations. To carry out this program has meant the driving of many thousands of feet of crosscuts and raises through hard, barren rock, at considerable expense. But last year's results, in the shape of ore already in reserve, and the cheapness at which it will be possible to mine most of it in the future, fully justify these expenditures.

Connections

This operation consists of driving raises for ventilation purposes, drifts around caved workings, shortening haulage ways, etc., and is always in progress as the center of mining activity shifts from one section of the Mine to another. In 1929 more than 1,274 feet of such work was done as compared with 678.5 feet in 1928.

Candelaria Group

The only work done in the past year in this group was development of the main Candelaria vein eastward at the Upper 600 level, in blocks 40 and 41. The distance driven was 166 feet, exposing a narrow and valueless vein. While this section, and particularly that farther eastward, holds out fair future prospects for a limited body of ore, its development is not planned in the coming year mainly because of its isolated location with respect to the present active mine workings and correspondingly excessive cost.

Capitana Vein

Further work in 1929, consisting of a raise 111 feet high, was done at the lower 200-foot level to get beneath the ore existing in the floor of the Lower 100-foot level. This raise failed to encounter the ore, which indicates that its downward extent is much shallower than expected. Work was stopped due to isolation of the place and expensive upkeep and supervision. The raise, which lacks only about 25 feet to connect with the Lower 100-foot level, should be driven at some future time so that any ore found at this level can be mined.

The Upper workings of this vein are generally open and there are fair chances of developing limited bodies of ore in several places. This work could best be undertaken when other mining operations which can absorb some of the fixed charges are carried on in the vicinity at the same time.

Culebra Vein

The Culebra vein has consistently been a low-grade vein, and while there are still possibilities of finding more ore with a moderate amount of development, this is not planned for the coming

year. Five thousand, two hundred and fifty-eight tons of ore were mined in 1929 and about half that amount is expected in 1930. Development consisted of 172 feet.

Jucuara Vein

While no work was done on this vein last year, development of similar veins in the Esperanza section below the Upper 150 level, such as the Santa Fe and Salvador, has disclosed information which leads to the belief that the chances of finding ore in the Jucuara at this low horizon are good. The most likely point in the Esperanza section from which to drive for the Jucuara is the Lower 300 Northwest Salvador heading, which has a general direction toward the Jucuara and at the present time is about 1,500 feet distant. Most of this distance would be driven on the Salvador vein, thus exploring this vein at the same time. Ore found in the Jucuara at this level would be around 370 feet vertically or about 500 feet along the slope of the vein below the present Upper 150 Jucuara shaft, where ore for a depth of at least 50 feet (the depth of the shaft) is known to exist. This work is considered very important and is in progress.

Northwest

No development work was done but 320 tons of ore were mined during the past year. There are good possibilities of obtaining limited bodies of ore on the Upper 600 level, Block 57, the Lower 100 level, Blocks 50-51, and Lower 300 level, Blocks 48-49. The best time to mine this ore would be when other work is being done in the vicinity.

Santa Gertrudis

No development was done but 2,030 tons of ore were mined which came from the Zero level. The future possibilities of this vein are the same as described in previous reports and should be kept in mind, and the needed development carried out when work in this section of the Mine is resumed.

San Joaquin Vein

The 425-foot crosscut driven at the Lower 300 level off the San Vicente vein to intersect the San Joaquin reached its objective, but failed to encounter ore. The vein at this point is very narrow and after 14 feet were driven on it the work was stopped. The San Joaquin seems to have better possibilities to the Northwest on this same level, but owing to the necessity of recovering several hundred feet of caved ground and laying nearly 3,000 feet of track and pipe, development work in this section is not contemplated for the coming year.

Socorro Vein

Driving was done at the Upper 900 level on the San Vicente vein to effect a new and more accessible entry into the upper Socorro and Candelaria workings. The Socorro has development possibilities at the Upper 600 and Upper 700 levels which it would be worth while to investigate when work in other veins in the same section, as for instance, the Candelaria and Capitana, is also going on.

Ore production in 1929 was 564 tons, mostly of average grade.

South San Miguel Group

Practically all of the 4,661 tons of ore mined in 1929 came from the two branch veins wherein also the 492.5 feet of development was done. As was pointed out in the 1928 report the ore, owing to the rather broken character of the vein, is low in grade and requires careful mining to make it pay.

The future possibilities of this vein still lie to the south as has been outlined in previous reports.

Outside of sending to the mill the ore already broken, no work is planned in this vein unless a better price of silver prevails.

West Vein

The winze at the Upper 150 level, in Block 65, was the only source of ore in the year past, only 172 tons being obtained. It will not pay to do any more work on this vein unless much better silver prices prevail, because such development ground as remains is nearly all below the center of mineralization. Therefore, no rich deposits, such as made this vein the principal producer in the past, can be expected.

Salvador Group
(*Carmen - Fortuna - Vein No. 4 - Salvador and Branch Veins*)

Carmen Vein

Driving of the crosscut at the Zero level off the Fortuna vein to intersect the Carmen was concluded and 474 feet of drifts and one raise driven on the Carmen vein. This work has proved disappointing in that the rich ore mined at the Upper 150 level, only 120 feet above, has not, so far, gone down to the Zero. About 800 feet of drifting on the vein still remain to be done at this level to explore the downward extent of all the ore-bearing section of the Upper 150 level. Although from what has just been said ore occurrence in quantity at the Zero cannot now be expected, raises to be driven between the Zero and the Upper 150 should encounter the bottom of the orebody which may, after all, prove quite extensive.

Until this work is carried out, the Carmen ore reserve has been reduced both in value and tonnage as compared with that reported in 1928.

Fortuna Vein

Two hundred feet of drifting on the Fortuna vein at the Zero level opened up about 150 feet of ore which, although not as good as that on the Upper 150-foot level, 110 feet above, it will pay to stope. About 250 feet of drifting along the Fortuna are lacking to intersect the Carmen vein, and it is expected that more ore will be found in this interval. On the Lower 300-foot level, 260 feet were driven on what is assumed to be the Fortuna vein. While a strong vein exists here it is of no stoping importance. On the Upper 350-foot level in the northern section, 360 feet of drifting disclosed about 280 feet of low-grade ore. The vein still continues in this heading and should be driven on in the future.

The ore production in 1929 was 5,827 tons.

Vein No. 4, which is a branch vein of the Fortuna, was in the past year developed to the extent of 754 feet and produced 4,562 tons of low grade ore. An equal tonnage of about the same grade of ore can readily be obtained in the coming year if necessary.

The upper and lower reaches of this branch vein have as yet not been determined.

Salvador Vein

This vein, with its branch veins Nos. 1 and 2, in the past year was developed 3,013.5 feet, and produced 28,632 tons of ore. While in the 1928 report disappointment was expressed over the results obtained from development at the Lower 200 and Lower 400 levels, nevertheless, hope was held out for more promising results as development of the large unexplored territory in this section proceeded. Last year's work here, which has come up to expectations, has shown that the ore does go as deep as the Lower 200 without diminution in value, and that it is just as continuous as at the Zero level. Very little work was done at the Lower 400 level, but a new level, the Lower 300, was started during the year to find the extension of the Lower 200 ore just described. This level has already encountered a portion of the Lower 200 orebody and, while possibly not as rich or uniform, a large tonnage is expected. A very considerable amount of undeveloped territory still remains in the Salvador below the Upper 150 level, but it is being opened up at a good rate. It is quite possible that the vein divides into branches on its downward extent the same as it did in its upper.

At the Upper 350-foot level work was done to the south and a moderate quantity of fair-grade ore found. Further development southward is well warranted.

Connection with the surface was made through a raise from the highest Salvador stope at the Upper 800-foot level, and a crosscut driven from the surface to meet it. Its main purpose was much-needed ventilation, which has proved very successful.

Independencia Vein

Further development westward at the Lower 200-foot level and away from the faulted section, as outlined in the 1928 report, resulted in again picking up nearly 400 feet of vein in very good ore and width, as shown on the map. Work at the Lower 300-foot level, 130 feet below the Lower 200 in this same section, indicates that more or less the same favorable conditions can be expected. At the Lower 400 level development was done also to the west and ore encountered, but lower in grade and less uniform in width. Last year's development points to the probability that the division of this vein into two or more branches below the Zero level is the result of a fault, partly ore-bearing itself in places, which is the San Blas vein.

Development work to the east at the Zero, Lower 200, Lower 300 and Lower 400 levels in the past year, while productive of some ore, was all in soft, badly fractured ground. The tendency of the vein in this section is to split into numerous stringers, making it difficult to know which one to follow. The plan is to drive eastward until the San Blas fault is reached, and thereafter drive crosscuts to see if the Independencia exists on the other side.

Another fault exists at the extreme west end of the vein, striking at about right angles to it and dipping westward. At the Upper 150 level rich ore extends right up to this fault, but as yet no effort has been made to find it on the other side. This fault in its dip increases the possibilities for greater westerly extent of ore on the lower levels.

Development in 1929 was 3,532.5 feet and ore production 31,206 tons, all very good grade.

Santa Fe Group

(*Santa Fe - San Benito - San Luis and Stringers*)

The veins comprising this group are the Santa Fe, San Luis and San Benito, including branch veins and stringers. They are all inter-related, merging and crossing each other on the various levels below the Upper 150-foot level. They have all been described in detail in previous annual reports since their discovery by the Upper 150 Esperanza Crosscut several years ago.

The total exploration and development driven in this group in 1929 was 8,380 feet. The total ore production was 27,933 tons, of which 23,581 tons came from development excavations alone. The details of development work in each vein, its ore production and ore reserves, will be found in the corresponding annexes appended to this report.

Santa Fe Vein

The Santa Fe vein is considered an excellent find whose lateral limits have not as yet been definitely determined. It is of more than average width, 3.1 feet, fairly consistent as to value, and

holds out every promise of becoming a very large ore producer in the future.

San Benito Vein

This is a narrower vein carrying a slightly higher gold content than the Santa Fe. It is also considered an important find. Its lateral and vertical limits have not as yet been determined, faulting having either interrupted or entirely displaced this vein in the western section.

San Luis Vein

The moderate amount of development work which has been done on this vein at the Lower 400-foot level shows that, though ore-bearing, it is narrower than the other two and has a tendency to split into stringers which, though also ore-bearing, are too narrow to be of commercial value. As soon as it was determined that this vein was a branch of the Santa Fe, preference of development was given to the latter. However, further development is to be done on the San Luis on the possibility that its width will improve.

Esperanza Crosscuts (Future Exploration)

The object of these crosscuts, as explained in detail in previous reports, is to explore the still very extensive unexplored territory southward of the Old Mine vein system. Continuous work for the past 18 years has resulted in there now being an Esperanza crosscut on most of the levels, length of such a crosscut on some reaching 6,500 feet, as at the Upper 150 level, and 4,590 feet at the Lower 650 level.

The Upper 150 level crosscut, the first to be driven and farthest advanced, penetrated the sedimentary formation in 1926. As this formation, which is away from the igneous ore-bearing rock contact, has so far never proved ore-bearing, work was stopped. Instead, it was confined in the same direction, but some 2,000 feet to the east, where the southern extent of the igneous rock was assumed to be appreciably greater. After driving 1,950 feet at this point (the Upper 150 South Salvador crosscut), it was found that, while the igneous rock continues, it is badly fractured and has other characteristics making it an unlikely source for ore deposition. This, and the fact that the heading is now more than 9,000 feet from the nearest surface portal and about 3,120 feet from the nearest source of natural ventilation, caused further work at this point to be abandoned. Driving of the original Upper 150 Esperanza crosscut, with the necessary change in direction, has been resumed, and ultimately a branch crosscut, about 2,800 feet in length, is to be driven to the surface on the western slope of the mountain to supply much needed ventilation, timber and, in the event of ore being found, to establish a camp for the miners who would be working in this section of the property.

While, as has just been stated, this Upper 150 Esperanza crosscut is at the present time in the barren sedimentary formation, this formation, so far as it has been possible to ascertain up to the present time, does not show at the immediate surface. This leads to the belief that it may be either an underground island or a ridge capped with the igneous rock. The important fact is that the igneous rock, east of the contact with the sedimentary and up to within a few feet of it, is highly prolific in veins, having already produced the Carmen, Fortuna, Independencia and, in recent years, the San Luis, San Benito and Santa Fe. Therefore, the main object now of the Upper 150 Esperanza crosscut is to drive through this capped sedimentary ridge, penetrate the igneous rock on the other or western side, and systematically explore this for veins.

A number of narrow veins and stringers intersected by the various Esperanza crosscuts in the course of years still remain to be explored. The pinching and swelling of veins from several feet to only inch-wide streaks, ore-bearing or barren, in comparatively short distances is a characteristic of this Mine. It follows, therefore, that such vein showings in the Esperanza crosscuts and other places, provided they exist in ore-bearing territory, should be thoroughly explored. In the coming year work is planned on several.

Porvenir Adit Crosscut

The purpose of this crosscut is shorter access into the Esperanza section of the Mine from the surface at the Upper 150 level, as well as exploration of the intervening territory wherein it is also possible that the southern extension of the Culebra vein may be found.

Owing to the press of more urgent work, it was possible to drive only 234.5 feet in the past year. Approximately 1,500 feet remain to be driven until the outside and inside headings meet.

Upper 150 West Crosscut

This crosscut is now 780 feet long from the West vein junction, 155 feet being driven in the past year. Besides being an exploratory project into the Quebrada Honda section of the property, the object is also to penetrate the surface and make available an important timber tract. Approximately 2,500 feet are required to reach the surface. It is planned to drive this crosscut at a much more rapid rate in the coming year.

Veins Not Worked During 1929

The veins in which no work was done in 1929 are the following: Buena Ventura, Catalina, Crisanta, Guadalupe, Jucuara, North, North San Miguel Group, Nueva, Rosario, Southwest and Termópilas.

MINE EQUIPMENT

Air Compressors

The air compressor plant, consisting of two P. R. E. Ingersoll Rand compressors with electric motors mounted on driving shaft, each of about 2,100 cubic feet capacity, and one similar compressor, but of 950 cubic feet capacity, continued to render reliable service.

Underground Electric Hoist

One of the three vertical raises in the Esperanza section between the Upper 150 and the Lower 650 levels is used as a hoist, pipe and manway, and in the past year was equipped with an electric hoist and cage to facilitate the handling of mining supplies between these and the intervening levels. Shaft sets have been placed down to the Lower 300 level station and work is proceeding to reach the Lower 650 level as quickly as possible. Both the Upper 150 and the Lower 650 levels, 780 feet apart vertically, are served by electric haulage which extends to this raise or shaft, thus greatly facilitating the handling of large quantities of supplies promptly and cheaply.

THE MILL

Tonnage Crushed

	1929	1928
Total Wet tons received	127,050.12	124,601.48
Average per cent. moisture	10.034	11.249
Total dry tons milled	113,920	110,600
Average tons per day milled (365 days)	312	303
Average tons per day milled, full running time (308.137)	370	359
Average tons per day milled, per 1850-lb. stamp	18.5	18.0
Number of 1850-lb. stamps	20	20.
Total tons treated by present mill, to December 31, 1929	1,812,328	1,698,408

Recovery

	1929	1928
Average ounces silver received per ton	23.624	22.323
Total ounces silver received	2,691,236	2,468,924
Average ounces silver recovered per ton	21.735	20.625
Total ounces silver recovered	2,476,123	2,287,031
Average silver recovered, per cent.	91.820	92.390
Average ounces gold received per ton	.0941	.081
Total ounces gold received	10,720	8,959
Total ounces gold recovered per ton	.0904	.0768
Total ounces gold recovered	10,304	8,500
Average gold recovery, per cent.	96.06	94.81

Supplies Used

	1929		1928		1929 Per oz. fine bullion produced Grade of Ore	1928	
	Per ton of ore crushed				Ag. 23.624	Ag. 22.323	
	113,920 Tonnage		108,400		Au. .0941	Au. .081	
Cyanide (100% K.C.N.)	4.1003423	lbs.	3.82604	lbs.	.18898216	.1843413	lbs.
Steel Balls	.61012113	"	.....		.02812009	.....	
Zinc Dust	.79647120	"	.7552079	"	.03670885	.0363864	"
Muriatic Acid	.026307935	"	.0555877	"	.00121251	.0026783	"
Lime	7.8791520	"	9.009	"	.36314509	.434098	"
Pebbles, Foreign	.10400283	"	.7470162	"	.00475134	.035992	"
Borax Glass	.0483760	"	.02477	"	.00222962	.0011936	"
Soda	.0085147	"	.011709	"	.000392439	.0005641	"
Fuel Oil	.02487710	gal.	.02564	gal.	.00114656	.0012354	gal.
Tube Mill Rock	58.277738	lbs.	49.18264	lbs.	2.685983	2.36965	lbs.
Sulphur	2.642205	"	2.738408	"	.12177754	.131938	"

Ore Analysis

	1929	1928	1927	1926	1925
Silica (SiO_2)	73.98%	74.15%	73.63%	75.61%	72.98%
Alumina (Al_2O_3)	10.00%	13.57%	11.17%	3.94%	3.72%
Iron (metallic)	3.84%	3.45%	2.96%	3.47%	3.12%
Manganese	0.48%	0.83%	0.74%	0.97%	0.72%
Lime (CaO)	0.68%	0.57%	0.57%	0.57%	0.60%
Magnesia (MgO)	1.84%	0.49%	0.77%	1.08%	1.37%
Zinc	0.49%	0.50%	0.46%	0.87%	1.38%
Antimony	0.016%	Trace	0.06%	0.016%	Trace
Arsenic	0.021%	0.04%	0.03%	0.01%	Trace
Lead	0.27%	0.29%	0.22%	0.17%	0.19%
Sulphur	1.60%	1.25%	1.12%	1.56%	1.33%

Recovery

The possibility of a decrease in silver recovery was stated in the 1928 Annual Report, and in 1929, this was 91.82% or 0.57% less than in 1928. This drop, though less than anticipated, is assigned mainly to a change in the character of the ore which, as it is increasingly mined from a greater depth, becomes less amenable to treatment. A longer period of agitation, finer grinding, and perhaps stronger cyanide solutions, seem to be required to maintain the silver recovery above 92%. To obtain this it is necessary either to decrease the present daily milling rate and thus increase the time element in grinding and treatment, or else maintain the present milling rate or capacity by installation of additional equipment to give the necessary time element increase. Improvement in the character of the ore not being looked for unless substantial new ore deposits at a higher mineral horizon are encountered, and considering the permanent curtailment of present milling capacity undesirable, new equipment, consisting of two additional high agitation tanks and a 5 ft. x 22 ft. tube mill, was ordered, in the

expectation that, when installed, it will be possible to maintain a 92%, or better, silver recovery without decreasing present milling capacity.

Cyanide Recovery Process

This process was used throughout the year with success. Besides the recovery of cyanide from the tailings solution, a further advantage is being gained by the ability to use a cheaper grade of cyanide almost continuously without fouling the working solutions.

An additional small disperser unit and vacuum pump were added to the equipment in the past year.

POWER

Rainfall	1929	1928	1927
Total Rain, Inches	58.28	70.24	61.43
Number of Rainy Days	192	211	197
Greatest Monthly Rainfall	12.36 (Oct.)	19.62 (June)	10.54 (June)
Lowest Monthly Rainfall	.44 (April)	1.11 (March)	.58 (Feb.)
Greatest Single Rainfall	2.24 (May)	3.06 (June)	2.77 (Oct.)

POWER DISTRIBUTION

	1929		1928	
	Kilowatt Hours	K.W. Hours Per Ton	Kilowatt Hours	K.W. Hours Per Ton
Mine Power	3,365,250	29.540	3,083,510	27.880
Electric Haulage	393,000	3.450	362,800	3.280
Mine Blacksmithing	8,000	.070	.....	.....
Mine Lights	20,800	.183	18,210	.164
Mill Power	3,151,550	27.665	3,571,480	32.292
Mill Lights	24,000	.211	24,000	.217
Surface Lights	27,600	.242	25,300	.229
Surface Power	118,000	1.036	100,000	.904
Machine Shop	27,400	.240	24,200	.219
Laboratory	6,000	.053	6,000	.054
Totals	7,141,600	62.690	7,215,500	65.239
Power Production by:				
San Juancito Plant		55.84%		63.50%
Guadalupe Plant		44.16%		36.50%

COST OF POWER PRODUCTION

	1929			1928		
	Amount	Per Ton	K.W.Hr.	Amount	Per Ton	K.W.Hr.
Labor	$ 9,438.76	.0829	.001322	$ 9,780.46	.0884	.001356
Supplies	4,277.27	.0375	.000599	2,901.54	.0262	.000402
Totals	$13,716.03	.1204	.001921	$12,682.00	.1146	.001758

Based on Horsepower Generated:	1929	1928
Horsepower Hours	$9,573,190	$9,672,252
Cost per Horsepower Hour	$ 0.001433	$ 0.001311
Cost per Horsepower Year	$ 12.5531	$ 11.5158
Cost per Horsepower Year, Increase	$ 1.04	$

Hydro-Electric Power Plants

Both the San Juancito and the Guadalupe plants, fully described in previous reports, continued to give satisfactory service throughout the year. The Guadalupe plant particularly, since the installation in 1928 of a larger penstock and more efficient impulse wheels, has been able to operate up to the full capacity of its two electric generators. The percentage of output in 1929 by each plant is now more nearly even; 55.84% San Juancito, 44.16% Guadalupe, as compared with 63.50% and 36.50% respectively in 1928. It is expected that, when the Guadalupe flume is releveled and repaired so as to permit a larger flow of water, the percentage will be still more nearly even.

The Guadalupe installation and that made in the San Juancito plant in the past 3½ years have resulted in a total plant capacity increase of about 400 K.W., without any addition of electric generating units. Sufficient power for full operation of the property in the wet season is now assured. The power shortage period in the dry season is now shortened very effectively.

Transmission Lines

As a result of the investigation made in 1928, a sufficient number of galvanized steel transmission poles and towers was ordered to replace the present wooden ones. Installation is now in progress, and there is no question that once the whole transmission line is on these steel poles, a very large item of upkeep expense will be eliminated, as well as frequent delays to operations to effect repairs.

Flume Lines

In the past year it was possible to do more than the usual amount of work on the various wooden flumes which serve the two power plants. Besides the customary upkeep, the Aguacatal flume, some 6,000 feet long, was replaced by a new one of larger dimensions. Some of the other flumes have reached a stage where it would be cheaper to replace them. There is a scarcity of lumber, and if present negotiations to acquire a timber tract at a reasonable figure result in naught, it probably will be best to install all future flumes of metal.

General

For greater security, efficiency and convenience, various changes in such equipment as switches, lightning arresters, etc., have been effected in the past year.

The new automatic telephone system put into service early in the year is satisfactory in every way, and is effecting a substantial saving over the old system.

The San Juancito Power Plant penstock, 4,739 feet long, has been repainted and should not require this attention again for several years.

OTHER DEPARTMENTS

Mechanical Department

This department, called upon to take care of more repair work than ever before, was able to handle all jobs promptly. A shaper and some minor appurtenances were added to the shop equipment during the year in order to make the property further independent of purchasing machinery replacements abroad.

As it is probable that most of the mining for some time will be confined to the lower mine levels which are now readily accessible by means of the underground electric hoist to the Lower 650 Electric Haulage level, where the Rosario general machine shop is also situated, it may be advisable to dispense with the machine shop and part of the blacksmith shop now at the Peña Blanca level, about 3 miles distant, and 800 feet higher in elevation, and do most of the work in one place, at the Rosario shop. Some additional equipment, such as a small high pressure air compressor, drill sharpeners and a building for the forges will be necessary before this change can be made. There is every reason to believe that with all drill repairs, most of the steel sharpening and some other mine jobs being done at one central place, a very material saving will result.

Medical Department

	1929	1928
Cost of Maintenance	$ 6,342.27	$ 5,632.96
Total consultation, examinations and treatments	11,637	11,539

To improve the hospital facilities, a complete X-ray outfit was ordered in the past year. With this the Rosario Hospital, though small, will be as modern as any in the Republic.

Assay Office and Laboratory

	1929	1928
Total number of assays run	19,234	25,110
Average number of assays per day	53	69
Total Cost	$ 5,218.52	$ 5,968.52
Cost per assay	0.27	0.24

Hotel

	1929	1928
Total number of meals served	30,335	29,464
Total Cost	$16,712.32	$15,510.82
Cost per meal	0.55	0.53

Roads

	1929	1928
Total maintenance	$ 7,746.75	$ 5,526.72
Increase	$ 2,220.03	

Schools

Average daily attendance during year:

	1929	1928
Boys' School	142	127
Girls' School	127	139
Total expense	$ 9,191.17	$ 8,544.38

Police and Garrison

	1929	1928
Total maintenance expense	$ 9,826.60	$10,562.77
Decrease	736.17	

Agencies

	1929	1928
Total expense	$ 4,028.87	$ 4,036.73
Decrease	7.86	

TIMBER SUPPLY

The timber used comes under two classes, pine for general construction, burning of lime and for charcoal, and hardwood for underground work. There is a great scarcity of pine timber, the supply of this on the company's zone, suitable for saw mill purposes, having been exhausted. Several small privately owned timber tracts exist adjacent to the company's zone, as well as one under Government domain, and in the coming year efforts will be made to acquire some of these.

It is very probable that the mining over the next four years will require more than the normal amount of extra large mine timber. The present source cannot supply this readily without considerable extension of roads and a substantial increase in price. One of the objects, therefore, besides exploration, of the driving of the Upper 150 West Crosscut to the surface at the Quebrada Honda is to tap the ample mine timber supply there. Driving of this crosscut is being pushed so that this timber will be available before that from the present source becomes too expensive.

EXPANSION

No work on any expansion projects was done in the past year. The sum of $3,487.61 was expended in taxes and watchmen, on the following properties: Aurora, Moramulca, California and Sabana Grande.

It is planned to send a scout into the field in the coming year, particularly to investigate certain gold regions in Central America.

CONCLUSION

The outstanding accomplishment of past year's work, as the reserve figures show, was the reaching of the main objectives in the Esperanza section of the mine, and opening up very sub-

stantial bodies of good grade ore, not only in veins already large producers for several years, but in new veins as well. The policy of developing the gold resources to the fullest extent, started more than five years ago and outlined in previous Annual Reports, has resulted in the present reserves showing a considerably greater ratio of gold to silver than has been the case for many years past. As mining is done for silver, and gold considered a by-product, the larger gold output in the future, and already evident in last year's production, should be of very material aid in helping to offset the recession in the price of silver.

There is every reason to believe that, given normal operating conditions during 1930, the silver production should at least equal that of the year just closed, and the production of gold be considerably higher.

It is again a pleasure to record the full support and confidence received from you and the gentlemen of the Board, and also to draw your attention to the faithful service rendered by the Staff to whom credit for what has been accomplished in the past year is largely due.

Respectfully submitted,

A. R. GORDON,
General Manager.

Annex "A"

Summary of Calculated Ore Reserves (At 13 cu. ft. per ton)

VEINS	Av. Width Ft.	Per Cent Waste	Tons of Ore & Waste	Ozs. Ag. per Ton	Ozs. Au. per Ton	Total Ozs. Ag.	Total Ozs. Au.
Carmen	1.8	50	10,000	16	.030	160,000	300
Fortuna Group	1.3	50	12,000	16	.040	192,000	480
Independencia Group	2.0	30	35,000	40	.243	1,400,000	8,505
Salvador Group	2.4	30	77,000	30	.113	2,310,000	8,701
San Benito	1.8	40	25,000	40	.3000	1,000,000	7,500
Santa Fe	3.1	30	79,000	30	.200	2,370,000	15,800
San Luis	1.8	40	4,000	22	.060	88,000	240
Culebra	1.7	50	8,700	16	.050	139,200	435
North San Miguel	1.6	35	4,800	15	.060	72,000	288
San Joaquin	1.0	60	9,500	15	.120	142,500	1,140
Santa Gertrudis	1.0	70	5,000	22	.030	110,000	150
South San Miguel Group	1.5	40	20,000	17	.060	340,000	1,200
Southwest	1.5	40	8,000	18	.040	144,000	320
Totals			298,000	28.41	.1512	8,467,700	45,059

Summary of Estimated Ore Reserves (At 13 cu. ft. per ton)

Buena Ventura	1,500	12	.06	18,000	90
Candelaria Group	5,000	12	.06	60,000	300
Capitana	3,000	10	.13	30,000	390
Catalina	3,000	14	.05	42,000	150
Colonia	2,000	14	.07	28,000	140
Esperanza	1,500	15	.05	22,500	75
Guadalupe	1,000	12	.03	12,000	30
Jucuara	2,000	12	.05	24,000	100
North	1,000	14	.05	14,000	50
Northwest	2,000	14	.05	28,000	100
Nueva	1,500	12	.05	18,000	75
Porvenir	2,000	13	.05	26,000	100
Rosario	5,000	12	.06	60,000	300
Socorro	1,500	14	.05	21,000	75
West	2,000	13	.03	26,000	60
Totals	34,000	12.63	.0598	429,500	2,035

Summary of Broken Ore in Stopes (At 21 cu. ft. per ton)

Total	26,530	24.43	.1000	648,128	2,653

Total Summary

Calculated Ore, at 13 cu. ft.	298,000	28.41	.1512	8,467,700	45,059
Estimated Ore, at 13 cu. ft.	34,000	12.63	.0590	429,500	2,035
Broken Ore in Stopes, at 21 cu. ft.	26,530	24.43	.1000	648,128	2,653
Totals	358,530	26.62	.1387	9,545,328	49,747

Annex "B"

BROKEN ORE IN STOPES
(At 21 cu. ft. per ton)

Total by Veins

VEINS	TONS
Culebra Sub-level	2,350
Fortuna	685
Independencia	7,600
Northwest	1,560
Socorro	870
San Luis	720
San Benito	865
Salvador	5,780
South San Miguel	1,620
Vein No. 4 (Fortuna)	2,060
Colonia Chute	300
Chute No. 51	1,500
Mill Bin	620
Total	26,530

Note: The following Broken Ore in Stopes Reserves have been excluded from the active Broken Ore in Stopes Reserves, shown above, as being too low in grade at present silver prices (43 cents per ounce). See report "Ore Reserves."

	TONS
Rosario, U. 350 Level, Block 37	1,469
Rosario, L. 450 Level, Block 26	435
Candelaria, U. 350 Level Candelaria, Zero Level Candelaria, L. 200 Level	1,260
Buena Ventura, L. 300 Level, Block 50	250
Total	3,414

Annex "C"

Exploration and Development for the Year 1929

Location	Drifts	Cross-Cuts	Raises	Winzes	Total Feet
Candelaria Group	166.0	....	....	....	166.0
Capitana	....	5.5	105.5	....	111.0
Carmen	474.0	245.0	303.0	....	1,022.0
Culebra	156.5	15.5	....	....	172.0
U. 150 S. Salvador Xcut	....	591.0	....	....	591.0
Esperanza Crosscuts					
U. 150 No. 1 S. W.	....	758.0	....	....	758.0
U. 150 No. 2 S. E.	....	105.0	....	....	105.0
L. 200	7.5	650.5	....	....	658.0
L. 300	224.5	283.5	....	....	508.0
L. 400	60.0	174.0	....	....	234.0
L. 500	....	417.0	....	....	417.0
L. 650	....	380.0	....	....	380.0
L. 650 Esperanza Raises					
No. 1, Hoist	....	....	258.0	....	258.0
No. 2, Ore	....	....	....	15.0	15.0
No. 3, Waste	....	....	8.0	....	8.0
No. 4, Manway	....	....	87.5	....	87.5
L. 400 Manway	....	....	32.0	....	32.0
L. 500 Manway	....	....	105.0	....	105.0
U. 150 Ventilation	....	....	281.0	19.0	300.0
Fortuna Group	1,631.0	211.5	283.5	....	2,126.0
Independencia Group	2,229.5	532.5	770.5	....	3,532.5
Porvenir	88.0	234.5	327.0	....	649.5
Salvador Group	2,431.5	294.0	288.0	....	3,013.5
San Benito	1,604.5	156.5	893.0	63.0	2,717.0
San Blas	141.0	....	137.0	....	278.0
San Joaquin	14.0	129.0	....	....	143.0
South San Miguel Group	414.5	38.0	40.0	....	492.5
San Luis	162.0	....	....	....	162.0
San Vicente	....	42.0	....	....	42.0
Santa Fe	3,199.5	92.0	2,194.5	15.0	5,501.0
Santa Gertrudis	....	2.5	....	....	2.5
U. 650 Outside Ventilation crosscut to meet U. 150 Ventilation Raise	....	299.0	....	....	299.0
U. 150 West Crosscut	....	155.0	....	....	155.0
Totals	13,004.0	5,811.5	6,113.5	112.0	25,041.0
Cutoffs	....	284.0	....	....	284.0
GRAND TOTAL	....	....	....	....	25,325.0

Annual Report **January 1, 1930**

Annex "D"

ORE PRODUCTION

Dry Tons

From Stoping Operations

Veins	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Colonia	....	....	38	44	....	....	....	....	....	....	....	....	82
Culebra	654	531	556	293	159	394	527	525	476	429	372	276	5,192
Fortuna } Group	600	393	431	129	365	167	282	245	288	490	359	156	3,905
Veta No. 4 } Group	586	191	333	228	465	354	196	124	323	417	387	16	3,620
Independencia } Group	3,753	2,151	2,477	599	299	1,503	2,978	3,174	2,446	2,507	1,866	1,709	25,462
San Blas } Group	204	....	....	....	....	....	....	....	....	....	....	....	204
Northwest	274	6	....	28	....	....	....	9	3	....	....	....	320
Salvador } Group	2,591	3,902	2,042	446	589	2,800	1,892	988	850	1,437	2,048	2,192	21,777
Veta No. 1 } Group	200	151	212	180	506	147	....	....	....	....	....	....	1,396
Veta No. 2 } Group	....	....	....	....	316	30	....	....	....	....	....	....	346
Santa Fe	....	....	....	....	....	....	....	364	195	405	10	176	1,150
San Benito	93	115	229	258	328	126	....	....	33	259	420	553	2,414
San Luis	....	....	....	....	12	118	193	189	205	71	....	....	788
Santa Gertrudis	59	266	277	117	48	237	216	279	234	218	79	....	2,030
S. San Miguel Group	513	493	1,134	244	261	147	162	305	202	139	167	116	3,883
Socorro	86	125	66	27	33	65	73	14	9	66	....	....	564
West	3	58	57	36	18	....	....	....	....	....	....	....	172
Totals	9,616	8,382	7,852	2,629	3,399	6,088	6,519	6,216	5,264	6,438	5,708	5,194	73,305

From Development Excavations—													
Carmen	....	....	....	....	....	....	16	21	207	192	182	162	780
Culebra	....	....	10	8	48	....	....	....	....	....	....	....	66
Fortuna Group	16	....	11	133	129	333	266	396	379	157	102	....	1,922
Veta No. 4 Group	6	28	47	182	119	174	87	29	65	73	81	51	942
Independencia Group	799	683	719	270	477	362	481	529	176	417	575	256	5,744
San Blas Group	....	....	....	....	....	....	6	50	12	32	19	....	119
Porvenir	....	....	....	....	....	....	21	108	22	24	35	....	210
Salvador Group	65	56	258	223	278	922	846	717	877	656	779	1,178	6,855
Santa Fe	230	244	272	616	1,234	1,490	1,708	1,861	2,066	2,646	2,793	3,310	18,410
San Benito	183	266	223	163	37	281	710	662	703	621	629	401	4,879
San Luis	111	158	23	....	....	....	....	....	....	....	....	....	292
South San Miguel	....	....	....	....	....	....	52	309	174	131	10	102	778
Totals	1,410	1,435	1,563	1,595	2,323	3,562	4,193	4,682	4,621	4,949	5,205	5,460	40,997
GRAND TOTAL	11,026	9,817	9,415	4,224	5,721	9,650	10,712	10,898	9,885	11,387	10,913	10,654	114,302

Annex "E"

TONNAGE MINED

From October 1, 1907, to January 1, 1930

	Total including Stoping, Devel. & Filling Oct. 1, 1907 to Dec. 31, 1928	Total including Stoping, Devel. & Filling Year 1929	Grand Total including Stoping, Devel. & Filling Jan. 1, 1930
Buena Ventura	98,490	....	98,490
Candelaria Group	166,573	....	166,573
Capitana	54,268	....	54,268
Carmen	17,526	780	18,306
Catalina	6,587	....	6,587
Colonia	56,356	82	56,438
Concepción	19,170	....	19,170
Crisanta	7,410	....	7,410
Culebra	98,870	5,258	104,128
Esperanza	8,710	....	8,710
Fortuna Group	64,328	5,827	70,155
Guadalupe	61,177	....	61,177
Independencia	86,243	31,206	117,449
Jucuara	2,212	....	2,212
North	4,647	....	4,647
Northwest	88,557	320	88,877
Nueva	28,147	....	28,147
Porvenir	1,501	210	1,711
Rosario	150,915	....	150,915
Salvador Group	243,899	28,632	272,531
San Benito	6,070	7,293	13,363
San Blas	4,729	323	5,052
San Joaquin	63,030	....	63,030
San Luis	922	1,080	2,002
San Miguel North	174,801	....	174,801
San Miguel Group	114,748	4,661	119,409
Santa Fe	678	19,560	20,238
Santa Gertrudis	28,759	2,030	30,789
Socorro	21,400	564	21,964
Southwest	20,509	....	20,509
Thermópilas	1,094	....	1,094
West	96,833	172	97,005
Veta No. 4	....	4,562	4,562
Ore from Development	63,599	....	63,599
Miscellaneous	1,573	1,742	3,315
Totals	1,864,331	114,302	1,978,633

Summary

October 1, 1907, to January 1, 1930

From Stoping	1,561,373
From Development	183,860
From Fills	233,400
Total	1,978,633

REPORT of the
NEW YORK & HONDURAS
ROSARIO MINING CO.

1930

NEW YORK

January 1, 1931

OFFICERS 1931-1932

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H. A. GUESS, *Vice-President*

A. R. GORDON, *Vice-President*

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LEWIS L. CLARKE, W. C. LANGLEY } *Ex-Officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company for the Year Ended December 31st, 1930

April 1, 1931.

To the Stockholders and Directors of the
New York & Honduras Rosario Mining Company.

A year ago I had the pleasure of reporting a greater production than that of the preceding year, and it is gratifying now to report that the figures for 1930 show an increase over those of the year 1929.

Ounces of silver recovered amounted to 2,957,119 against 2,466,095 in 1929, an increase of 491,024 ounces, and ounces gold were 13,498, against 10,245 in 1929, an increase of 3,252 ounces.

In previous reports your attention was invited to the substantial percentage of our income derived from other than mining operations. In 1930 Miscellaneous Income from these other sources amounted to $121,147.69, or 24.42% of the Total Income of $496,212.17.

All facts considered, the results for the year just closed can be viewed with satisfaction. It is only proper, however, to direct your attention to the steady decline in the price of silver during 1930, the average quotation, as published by Messrs. Handy & Harman, being 45c per ounce for the month of January, and 32.635c per ounce for December. Naturally this affected our earnings very materially, but we were fortunate in being able to offset to some extent the reduction in earnings, due to the decline in silver, by an increased gold production and reduced operating costs, representing a net reduction in the cost per ounce of silver, of 8.84 cents, as compared with the year 1929. It must be borne in mind, however, that in order to accomplish these results, it was necessary to treat only the better grade of ore. Of this you were advised in my letter of October 31, 1930.

It is only right that your attention should be directed to the extremely low price touched by the white metal in February, 1931, (25¾ cents on February 16th), although during March there was a slight recovery and a better general feeling prevailed. There have been discussions with a view to remedying the existing condition in the silver market, and it is hoped that in the near future some definite plan will be developed that will bring about a better price for the metal.

The following tabulation will give you in comparative form the salient facts concerning our operations for the years 1929 and 1930:

	Year 1930	Year 1929	Increase *Decrease
Total Sales Value of Gold and Silver Recovered	$1,315,821.38	$1,477,710.79	*$161,889.41
Tons of Ore Milled	108,480.00	113,919.57	*5,439.57
Ounces of Silver Recovered	2,957,119.98	2,466,095.27	491,024.71
Number of Ounces of Silver Recovered per ton of Ore	27.2595	21.6477	5.6118
Ounces of Gold Recovered	13,498.365	10,245.743	3,252.622
Sales Value of Silver Recovered	1,036,810.24	1,265,931.29	*229,121.05
Average Sales Value of Silver per Ounce	.3506	.5133	*.1627
Average Cost of Silver per Ounce	.2240	.3124	*.0884
Average Profit on Silver per Ounce	.1266	.2009	*.0743
Total Sales Value of Gold Recovered	279,011.14	211,779.50	67,231.64
Value of Gold per Ounce	20.67	20.67	
Value of Silver Recovered per Ton of Ore	9.5576	11.1125	*1.5549
Average Cost of Silver per Ton of Ore	6.1076	6.7642	*.6566
Average Profit on Silver Recovered per Ton of Ore	3.45	4.3483	*.8983
Value of Gold Recovered per Ton of Ore	2.5720	1.8590	.7130
Number of Bars Bullion Shipped from Mine	1,748	1,550	198

Income and Profit and Loss Statement For the Year Ended December 31, 1930

Production of Gold and Silver			$1,315,821.38
Less: Freight and Expenses on Bullion			68,810.14
Operating Income			$1,247,011.24
Deduct: Operating Expenses			805,691.75
Operating Profit			441,319.49
Deduct: New York Administrative Expenses			67,065.58
Net Profit from Operations			374,253.91
Other Income			121,958.26
			496,212.17
Other Deductions			14,990.80
Net Profit Before Federal Income Tax and Provision for Reserves			481,221.37
Federal Income Tax			34,220.22
Net Profit for Year			447,001.15
Appropriated for Reserves from Earnings—			
Depletion (based on valuation of mine, March 1, 1913)	$ 532.70		
Fire Insurance	8,632.74		
Transit Insurance	4,386.54		13,551.98
Profit for the Year Carried to Surplus			433,449.17
Surplus—			
Surplus—January 1, 1930		$1,991,044.34	
Deductions-			
Dividends Paid and Provided for	$375,000.00		
Decrease during 1930 in Market value of Securities owned at December 31, 1930	46,187.78		
Depletion (on appreciation of Mine Valuation)	532.70	421,720.48	1,569,323.86
Surplus—December 31, 1930			$2,002,773.03

NOTE—

—During the year 1927 the United States Government authorized a readjustment of our depletion account due to certain new discoveries. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Entries recording depletion on the new discoveries will be made in a supplementary memorandum ledger account wherein is set up the values allowed by the Treasury Department and showing the actual depletion sustained and allowable for each year. These depletion entries are made for income tax purposes only.

Condensed Balance Sheet
December 31, 1930

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion of Mines	2,123,060.62	$ 876,939.38	
Plant, Buildings, Machinery and Equipment	1,681,172.41		
Less: Allowance for Depreciation	1,247,475.00	433,697.41	$1,310,636.79
Current—			
Cash		41,577.98	
Bullion at Smelter and in Transit—Less: Allowance for Expenses		213,367.83	
Broken Ore in Stopes and Mill Bin, at Cost		143,842.89	
Materials and Supplies—at Cost		227,065.36	
U. S. and Other Marketable Securities, at Market plus Interest		2,138,449.04	2,764,303.10
Other Assets—			
Sundry Accounts Receivable		3,221.47	
Capital Stock of Other Company (Nominal Value)		1.00	3,222.47
Deferred Charges—			
Prepaid Insurance, Taxes and Expenses			263,157.54
TOTAL ASSETS			$4,341,319.90

LIABILITIES

Current—			
Drafts Payable		$ 19,249.09	
Accounts Payable		31,413.08	
Federal Income Taxes—1930		34,220.22	$ 84,882.39
Reserves—			
Dividends—Payable January, 1931		$ 100,000.00	
Mine Fire Insurance		88,812.38	
Transit Insurance		33,690.76	
Sabana Grande-Honduras Mining Company Advances		31,161.34	253,664.48
Capital Stock—			
Authorized and Issued—200,000 shares of a Par Value of $10 per share		$2,000,000.00	
Surplus—			
Earned	$1,413,020.47		
Appreciation of Mine Valuation	$1,500,000.00		
Less: Depletion Earned	910,247.44	$ 589,752.56	$2,002.773.03 $4,002,773.03
			$4,341,319.90

Balance Sheets of the Company at beginning and at the end of the year covered by this Report may be condensed and compared as follows:

	December 31, 1930	December 31, 1929	Increase *Decrease
Current Assets	$2,764,303.10	$2,746,634.08	$17,669.02
Current Liabilities	84,882.39	98,604.07	*13,721.68
NET CURRENT ASSETS	2,679,420.71	2,648,030.01	31,390.70
Other Assets	3,222.47	7,271.84	*4,049.37
Permanent Assets less Depreciation	433,697.41	418,040.14	15,657.27
Mines, Real Estate and Concessions, less Depletion of Mines	876,939.38	878,004.78	*1,065.40
Deferred Charges	263,157.54	280,002.42	*16,844.88
	$4,256,437.51	$4,231,349.19	$25,088.32
Represented by:			
Reserve—Insurance	$ 122,503.14	$ 109,483.86	$13,019.28
Reserve—Dividends Payable	100,000.00	100,000.00	.....
Reserve—Sabana Grande Advances	31,161.34	30.820.99	340.35
Capital Stock	2,000,000.00	2,000,000.00	.....
Surplus	2,002,773.03	1,991,044.34	11,728.69
	$4,256,437.51	$4,231,349.19	$25,088.32
Ratio of Current Assets to Current Liabilities	32.57 to 1	27.85 to 1	4.72 to 1

Dividends Paid

April, 1930	$ 50,000.00	
July, 1930	50,000.00	
October, 1930	75,000.00	
December, 1930	100,000.00	
January, 1931	100,000.00	$375,000.00

Auditors' Certificate

WE HEREBY CERTIFY that we examined the books of account and record of NEW YORK & HONDURAS ROSARIO MINING COMPANY, NEW YORK CITY, for the year ended December 31, 1930, and, subject to the fact that we did not examine the records at the mine office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at December 31, 1930, and that the related Income and Profit and Loss Statement is correct.

(Signed) ERNST & ERNST.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
1925	1,763,023.16
1926	1,601,429.35
1927	1,341,300.06
1928	1,500,233.98
1929	1,477,710.79
1930	1,315,821.38
	$43,427,526.88

Distribution to Stockholders

1887 No. 1	$37,500— 2½%	Dividend
1888 Nos. 2 to 5	60,000— 4%	Dividend
1889 Nos. 6 to 14	150,000—10%	Dividend
1891 Nos. 15 to 16	30,000— 2%	Dividend
1892 Nos. 17 to 21	165,000—11%	Dividend
1893 Nos. 22 to 25	150,000—10%	Dividend
1894 No. 26	37,500— 2½%	Dividend
1896 Nos. 27 to 28	30,000— 2%	Dividend
1897 Nos. 29 to 40	180,000—12%	Dividend
1898 Nos. 41 to 48	120,000— 8%	Dividend
1899 Nos. 49 to 60	180,000—12%	Dividend
1900 Nos. 61 to 75	225,000—15%	Dividend
1901 Nos. 76 to 93	300,000—20%	Dividend
1902 Nos. 94 to 100	105,000— 7%	Dividend
1903 No. 101	15,000— 1%	Dividend
1904 Nos. 102 to 108	105,000— 7%	Dividend
1905 Nos. 109 to 121	180,000—12%	Dividend
1906 Nos. 122 to 139	285,000—19%	Dividend
1907 Nos. 140 to 153	210,000—14%	Dividend
1908 Nos. 154 to 165	180,000—12%	Dividend
1909 Nos. 166 to 173	120,000— 8%	Dividend
1910 Nos. 174 to 180	105,000— 7%	Dividend
1911 Nos. 181 to 182	90,000— 6%	Dividend
1912 Nos. 183 to 184	70,000— 3½%	Dividend
1913 Nos. 185 to 188	180,000— 9%	Dividend
1914 Nos. 189 to 193	240,000—12%	Dividend
1915 Nos. 194 to 197	240,000—12%	Dividend
1916 Nos. 198 to 205	400,000—20%	Dividend
1917 Nos. 206 to 211	300,000—15%	Dividend
1917 No. 1	100,000— 5%	Amortization
1918 Nos. 212 to 215	200,000—10%	Dividend
1918 Nos. 2 to 5	200,000—10%	Amortization
1919 Nos. 216 to 219	200,000—10%	Dividend
1919 Nos. 6 to 9	200,000—10%	Amortization
1920 Nos. 220 to 225	320,000—16%	Dividend
1920 Nos. 10 to 11	80,000— 4%	Amortization
1921 No. 226	60,000— 3%	Dividend
1922 Nos. 227 to 229	150,000— 7½%	Dividend
1923 Nos. 230 to 234	250,000—12½%	Dividend
1924 Nos. 235 to 240	350,000—17½%	Dividend
1925 Nos. 241 to 247	350,000—17½%	Dividend
1926 Nos. 248 to 255	400,000—20%	Dividend
1927 Nos. 256 to 263	400,000—20%	Dividend
1928 Nos. 264 to 272	450,000—22½%	Dividend
1929 Nos. 273 to 281	500,000—25%	Dividend
1930 Nos. 282 to 288	375,000—18¾%	Dividend
Total	$9,075,000	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 288, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00

Comparative Statement of Net Assets

FOR THE YEARS ENDED DECEMBER 31st AS BELOW

CURRENT ASSETS—	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Cash and Cash Items	$470,377	$283,570	$308,423	$474,620	$ 146,298	$ 184,750	$ 94,999	$ 116,838	$ 382,693	$ 339,942	$ 41,578
Marketable Securities	179,822	408,485	564,611	546,239	1,394,411	1,818,692	1,932,105	1,970,034	1,739,977	1,827,816	2,138,449
Bullion in Transit	231,770	1,145	142,270	307,157	261,416	263,334	242,857	222,503	316,758	230,726	213,368
Ore in Stopes and Mill Bin	120,978	114,217	91,467	88,245	107,375	77,385	77,665	88,477	90,160	118,908	143,843
Materials and Supplies	403,393	308,464	191,772	210,782	235,033	247,461	286,312	242,925	240,828	229,242	227,065
Total Current Assets	$1,406,340	$1,115,881	$1,298,543	$1,627,043	$2,144,533	$2,591,622	$2,633,938	$2,640,777	$2,770,416	$2,746,634	$2,764,303
Deduct: Current Liabilities	199,069	218,387	218,305	205,153	262,560	278,038	123,768	117,830	133,891	98,604	84,882
Net Current Assets	$1,207,271	$897,494	$1,080,238	$1,421,890	$1,881,973	$2,313,584	$2,510,170	$2,522,947	$2,636,525	$2,648,030	$2,679,421
OTHER ASSETS—											
Accounts Receivable, Investments, Deferred Charges, etc.	144,173	178,546	269,179	312,547	222,260	139,276	150,155	253,536	267,620	287,274	266,380
PERMANENT—											
‡Mines, Real Estate, Concessions, Buildings, Machinery, etc. (less Allowances for Depreciation)	2,134,275	2,116,892	2,080,317	2,030,539	2,032,953	2,030,457	2,012,815	1,973,712	1,947,457	1,918,040	1,933,697
*Total Net Assets	$3,485,719	$3,192,932	$3,429,734	$3,764,976	$4,137,186	$4,483,317	$4,673,140	$4,750,195	$4,851,602	$4,853,344	$4,879,498
Increase of Net Current Assets over Preceding Year		†$309,777	$182,744	$341,652	$460,083	$431,611	$196,586	$12,777	$113,578	$11,505	$31,391
Increase of Net Current Assets over December 31, 1930		†$309,777	†$127,033	$214,619	$674,702	$1,106,313	$1,302,899	$1,315,676	$1,429,254	$1,440,759	$1,472,150

* Represented by Capital Stock, Surplus, Reserves for Depletion, Exchange Fluctuation, Contingencies, etc., with no adjustment for increased valuation of mines, etc.

† Decrease.

‡ Not adjusted for increased valuation of mines.

Government of Honduras

On behalf of the Company, it is my pleasure to extend to the Government and people of Honduras our cordial felicitations.

LEWIS L. CLARKE,
President.

Annual Report of the General Manager

January 1, 1931.

TO THE PRESIDENT,

NEW YORK & HONDURAS ROSARIO MINING COMPANY,
21 WEST STREET, NEW YORK, N. Y.

DEAR SIR:

The operations of this Company's mining property in Honduras during the fiscal and calendar year 1930 are covered briefly in the following report:

Production

	1930	1929
Dry Tons Treated	108,480	113,920
Average per ton—Troy ozs. silver mined	29.903	23.624
Average per ton—Troy ozs. gold mined	.1306	.094
Total Troy ozs. silver mined	3,243,867	2,691,236
Total Troy ozs. gold mined	14,167	10,720
Total Troy ozs. silver produced	2,957,156	2,476,124
Total Troy ozs. gold produced	13,571	10,304
Average per ton—Troy ozs. silver produced	27.258	21.735
Average per ton—Troy ozs. gold produced	.1251	.0904
Ratio of silver to gold	218:1	240:1
Bars Doré Bullion	1,748	1,505
Bullion fineness of silver	969.06	977.56
Bullion fineness of gold	4.447	4.07
Customs ore: included in totals above		
Silver	None	3,972.10
Gold	None	8.410
Obsolete coinage	234.41	429.00

The 1930 production, compared with that of 1929, is 481,032 ounces silver and 3,267 ounces gold higher, while the tonnage milled is 5,440 tons less. The average metal content per ton of the ore treated was the highest both in silver and in gold since the year 1924 when, however, the tonnage milled was considerably less.

Honduras Operating Costs

Operating Basis:	1930	1929
Dry tons milled	108,480	113,920
Troy ounces silver produced	2,956,921	2,471,723
Troy ounces gold produced	13,571	10,296
Total Troy ounces bullion produced	2,970,492	2,482,019
Feet exploration and development driven	21,518.5	25,325

	Total Costs		Per Ton		Per Troy Ounce Fine Bullion Produced	
Mine	1930	1929	1930	1929	1930	1929
Labor	$227,801.26	$267,856.06	$2.10	$2.35	$.0767	$.1079
Supplies	148,000.42	157,751.97	1.37	1.39	.0498	.0636
Power	5,379.32	7,383.71	.05	.06	.0018	.0030
Totals	$381,181.00	$432,991.74	$3.52	$3.80	$.1283	$.1745
Mill						
Labor	$ 54,031.26	$ 55,973.11	$ .50	$ .49	$.0182	$.0226
Supplies	176,058.57	156,234.97	1.62	1.37	.0593	.0629
Power	6,796.82	5,977.64	.06	.05	.0023	.0024
Totals	$236.886.65	$218,185.72	$2.18	$1.91	$.0798	$.0879
Honduras Administration	$146,589.05	$141,285.25	$1.35	$1.24	$.0493	$.0569
Totals	$764,656.70	$792,462.71	$7.05	$6.95	$.2574	$.3193
Credit value of gold produced	$280,241.15	$212,612.40	$2.58	$1.87	$.0943	$.0857
Net cost of silver	$484,415.55	$579,850.31	$4.47	$5.08	$.1631	$.2336
Cost per Troy ounce silver produced	$.1631	$.2336				

While the 1930 production, as compared with that of 1929, was 481,032 ounces silver and 3,267 ounces gold greater, the total Honduras Operating Costs on the other hand were $95,435.00 less. Unit costs on the basis of per Troy ounce of bullion produced or per ton of ore treated, were reduced by $0.07 and $0.61 respectively as compared with 1929. Also, in 1930, 9,523 tons of ore were mined in excess of the amount milled in the same period. All costs of mining this ore, excepting those of transportation to the Mill and its treatment there, were carried by the 1930 expenditures.

Important cost reductions have been made in the Mine Department, where, due to operating improvements and other factors, less labor was required than formerly to accomplish the same amount of work.

In the Mill Department total operating expenditures are somewhat higher than in the previous year. The increase, however, appears only in the item of supplies, which increase was necessary to take care of the larger bullion production.

The total expenditures for Administration are slightly higher than those of last year. While actually some reductions were made, these were more than offset by increases in certain other fixed Administration expenditures, as for instance, the necessity of increasing the police garrison at Rosario at an additional expenditure of $6,392.00 due to the trouble in January.

In the latter part of the year an important reduction was made in the rates of land freight on supplies and bullion. It is believed that this reduction can be generally sustained and that therefore 1931 should show an appreciable saving in this item.

THE MINE

Ore Reserves

The drop in the price of silver from an average of 51 1/3 cents per Troy ounce in 1929 to 35 cents in 1930 has had its corresponding adverse effect on ore reserves. Accordingly, all reserves which are either too low in grade or too costly to mine must, until the situation becomes much more favorable, be eliminated from present operating considerations. The total existing reserves, therefore, have been divided into two classes, namely, the active and the inactive. The active reserves only contain ore which can be exploited under present economic conditions and thus are the main basis for 1931 mining operations. In calculating the active reserves an average value of 30 cents per Troy ounce for silver is assumed, and a mining and production scale more or less the same as in 1930. On this basis the summary of the active reserves shows, as of January 1, 1931:

Summary—Active Ore Reserves

	Tons of Ore plus Waste	Ozs. per ton Ag.	Au.	Total ozs. Ag.	Au.
Calculated Ore, at 13 cu. ft.	181,000	31.74	.1524	5,745,000	27,600
Broken Ore, in Stopes, at 21 cu. ft.	36,136	28.00	.12	1,012,564	4,340
Total Active Reserves as of Jan. 1, 1931	217,163	31.12	.1471	6,757,564	31,940

Annex "A" and the maps which accompany this report show these active reserves in detail and also that they are confined only to four veins as compared with three to four times that many in previous years. These four veins, however, are sufficiently opened up to supply the entire milling tonnage in 1931.

The inactive reserves, shown in detail in Annex "B," represent material which, under present silver prices and other adverse conditions, cannot be exploited at a profit. The summary of these inactive reserves as of January 1, 1931, is as follows:

Summary—Inactive Ore Reserves

	Tons of Ore plus Waste	Ozs. per ton Ag.	Au.	Total ozs. Ag.	Au.
Calculated Ore, at 13 cu. ft.	82,000	16.92	.0555	1,387,700	4,553
Estimated Ore, at 13 cu. ft	34,000	12.63	.0598	429,500	2,035
Total Inactive Reserves as of Jan. 1, 1931	116,000	15.67	.0567	1,817,200	6,588

The reserves reported above do not include reserves in prospect estimated at more than 400,000 tons and which must undergo further development.

Ore Production

The 1930 ore production came from five veins as compared with 17 veins in 1929 and 19 in 1928. The following comparative statement and Annexes "C" and "D" as well as the stope maps give this information in more detail:

	1930	1929	1928
By Stoping	69,391 tons	73,305 tons	95,704 tons
From Development Excavations	39,347 tons	40,997 tons	14,845 tons
Total	108,738 tons	114,302 tons	110,549 tons
Number of Producing Veins	5	17	19

The reason for concentration of work to fewer veins is due to recession in the price of silver, making the ore in the veins not worked unprofitable at the present time. Due to the heavy expense involved in keeping all the workings of these idle veins open this has not been undertaken. Sufficient maintenance work, however, is being done to assure general access to this section of the Mine in the event of a substantial rise in the price of silver again making portions of it profitable.

The work to provide additional natural ventilation for the Esperanza section of the Mine was concluded in the Fall when the Upper 150 Esperanza Level raise, 655 feet high, connected with a cross-cut, 235 feet long, driven from the surface to meet it. Besides solving the ventilation problem for some time an appreciable amount of power is also saved as it is now not necessary to operate the air compressor plant several hours daily just for ventilation purposes alone.

The labor employed by the Mine Department consisting of all underground men and those in the Mine Shops and Warehouses was distributed as follows:

	1930	1929	1928	1927
Day shifts	290	307	308	309
Average number of men per day shift	406	399	470	515
Night shifts	16	303	302	230
Average number of men per night shift	123	108	69	40
Total man shifts	119,708	155,217	165,598	168,217

The comparative table above shows an appreciable yearly decrease in man-shifts, notwithstanding the fact that there was a general increase in underground operations as well as in the production of silver and of gold.

Exploration, Development and Mining

In Annex "C" are given the details of all the exploration and development footage driven in 1930. The following is a summary thereof and comparison made with 1929:

Year	Drifts	Crosscuts	Raises	Winzes	Misc.	Total
1930	8,042.0	6,377.5	6,879.5	31.0	188.5	21,518.5
1929	13,004.0	5,811.5	6,113.5	112.0	284.0	25,325.0

The work of preparing the Esperanza section of the mine for large quantity ore production and as a center for future exploration and development, as described in detail in previous Annual Reports, has been concluded. There is now full access to the principal veins of this section on all levels and at a lower cost for subsequent mining operations therein than probably has ever been the case before in other sections of the mine under similar physical conditions. A saving in cost has already been reflected in 1930 and even in the previous year, in that while exploration, development and ore output from this section have materially increased, costs thereof have decreased.

Connections

This work, as has been explained in other reports, consists of driving raises and drifts, not entirely for the purpose of either development or exploration, but principally as connections for ventilation or to facilitate underground transportation, drainage, etc. Work of this nature during 1930 consisted of approximately 1,170 feet as compared with 1,274 feet in 1929.

Principal Veins Worked

The following is a brief description of the work done in the different veins in 1930.

Salvador Group
Salvador Vein

Development in the Salvador vein was 2,752½ feet, mostly at the Lower 200 and Lower 300 ft. levels. Bodies of medium grade ore were disclosed on each level, nearly all of which are downward extensions of those mined on the levels immediately above. The ore is less constant in extent and lower in average grade, the latter being a natural result of greater depth. Work was done also on the Zero level southward to develop the downward extensions of the rich ore mined at the Upper 150 ft. level in previous years. The results so far have proved disappointing as the vein at this point and elevation is broken up and next to valueless. Work here

has been suspended until the Lower 200 ft. level, being driven in the same direction, but about 125 feet deeper, enters this territory and gives additional information. At the Lower 300 ft. level about 500 feet of drifting was done on the vein to the west. After passing through the Lower 200 level ore zone the heading was continued farther westward for about 200 feet, the vein then splitting into narrow valueless stringers of which those with a more northerly direction should be investigated further.

In the coming year work is to be resumed at the Lower 400 ft. level and a new drift started on the Lower 500, to explore and develop the downward extent of the ore bodies existing at the Lower 300 ft. level and Lower 400 ft. level.

Fortuna Vein

The Fortuna and its adjacent Vein No. 4 produced 5,753 tons of ore of a grade which about covered operating expenses. The 310½ feet of development did not result in opening up ore of a grade workable at present silver prices. Outside of developing further one or two high grade ore possibilities, no other work is planned in these veins at the present time.

Carmen Vein

Outside of a raise 6½ feet high no other work was done in this vein in the year past as here too the readily available ore is too low in grade. However, it is planned to drive two or more raises from the Zero level to learn the downward extent of rich ore existing in the floor of the Upper 150 ft. level.

Independencia Group
Independencia Vein

The Independencia vein was, in 1930, the source of the best ore mined, 22,207 tons of this being produced. Development was 2,809 feet, nearly half of it consisting of raises required to trace out a badly faulted vein before stoping it.

Development of this vein to the West at the Zero, the Lower 200 and Lower 300 levels, was almost continuous throughout the year, these headings having now about reached the vicinity of the fault which has cut off the vein in its westerly extent, at all the upper levels. Recent work at the Lower 200 indicates that the faulting there is less pronounced than at the levels above; therefore, work is being continued into the territory on the other side of the fault with the hope that the vein will again be picked up. The search for the Independencia vein west of the fault is considered an important exploration project and is among those receiving first attention.

Exploration to the east at the Zero and the Lower 200 levels continued in the soft and faulted ground with the vein split into

numerous stringers. Small bunches of ore were found at the Zero, exploration eastward on the Lower 200 level encountering a persistent northeast branch vein similar to the Independencia, but of lower grade. This branch vein, so far, has continued 150 feet and is considered an encouraging strike, but is limited in its lateral extent owing to being only about 500 feet distant from the Salvadar vein.

San Blas Vein

This vein is a branch off the Independencia, and in the past year about 75 feet were driven to determine the downward extent of an ore body mined at the Upper 250 level. This vein, too, has been subjected to considerable faulting and will undergo no further work until more knowledge is gained regarding the general faulting in this section from exploration which is to be done in the adjacent vein, the Independencia.

Santa Fe Group
(Santa Fe - San Benito - San Luis Veins)

The Santa Fe Group produced in 1930, 53,679 tons of ore or 49½% of the total milled and was the source of 10,229 feet of exploration and development, representing 47½% of the total footage driven during the year.

Santa Fe Vein

This vein was the largest ore producer in 1930, its output alone being 34,643 tons, of which 19,753 tons, or 57%, came from development excavations. The large proportion of development ore is due to most of the development footage being confined to opening up the large and continuous ore body found about three years ago. The lateral ore limits of this body were reached some months ago when a badly faulted and generally impoverished section was encountered on most of the levels at both the eastern and western extremities of the vein. Exploration work was immediately started on the most favorable looking stringers in this disturbed territory to see if these will lead into ground more favorable for continuation of the vein. No definite results from this work have as yet been obtained, but it is being continued so long as a reasonable possibility of finding the vein on the other side of the faulting exists.

The total footage driven in the Santa Fe in 1930 was 7,295½ feet which represents the greatest footage driven in any one vein in 1930. Unless the vein is picked up again beyond the faulted sections mentioned, the 1931 development footage will probably be much smaller, as well as the percentage of ore from development excavations, which latter will tend to increase proportionately the cost per ton of the total ore mined from this vein.

San Benito Vein

The San Benito and the Santa Fe veins intersect each other in their strike and dip. Their geological and other conditions being identical the 2,933½ feet of exploration and development done in the San Benito in the past year had the same objectives as those just described in the Santa Fe. Here, too, the subsequent exploration work to the east and to the west, done after the ore limits of the present ore body were reached, has as yet disclosed nothing definite as to whether this vein can again be picked up on the other side of the disturbed and impoverished sections or not. So long as this is true some of the most likely looking stringers leading into this territory are being followed in the hope that one of these might connect with the main vein again.

The ore output in 1930 was 19,036 tons of which 7,815 tons, or 41%, came from development excavations. As in the case of the Santa Fe, unless 1931 development enters a fairly continuous ore body, the percentage of ore from development excavations will be very much reduced, and ore mining costs per ton increased proportionately.

San Luis Vein

This vein, which is really a branch stringer off the Santa Fe and San Benito, had no work done on it in the past year. A small quantity of good grade ore was mined in the past above the 150 ft. level, but its downward extent below that level has never been developed. Work to determine such extent may be started in 1931 as also some on the Lower 400 ft. level where the vein shows promise.

Jucuara Vein and Jucuara Cross-cut

The future possibilities of the Jucuara vein were outlined in the 1929 and previous Annual Reports.

In August, 1930, a cross-cut for this vein was started at the Lower 300 ft. level and it is now 385 feet long. About 800 feet are still lacking to reach the vicinity of the vein.

This exploration project, which incidentally should also intersect any northerly stringers of the Salvador vein, is an important one and every effort is being made to drive it as rapidly as possible.

Veins Not Worked in 1930

Owing to the low price of silver, generally small and scattered ore bodies and isolation of many of these from the present center of operations, it became necessary to suspend all work in 1930 in the following veins:

Candelaria Group, Capitana, Culebra, Northwest, Santa Gertrudis, San Joaquin, Socorro, South San Miguel Group and West Vein.

As some of these veins were in development or in production in 1929, general details of the situation in each are the same as those given in the 1929 Annual Report and previous reports.

Esperanza Cross-cuts

Of the 2,095½ feet of advance made in the various Esperanza Cross-cuts during 1930, 746 feet were driven in the cross-cut at the Lower 400 ft. level. This cross-cut parallels the one at the Upper 150 ft. level, but is about 500 feet deeper. The stratified rock formation existing in the Upper 150 cross-cut, which so far has proved barren of veins, has as yet not been encountered at the Lower 400 ft. level. Here the igneous rock formation, similar to that in which most of the ore bearing veins occur, still continues, and in the past year's work in this cross-cut several valueless stringers have been intersected. One or two of these show possibilities and it is planned to explore them in the coming year.

Upper 150 ft. Esperanza Cross-cut

This cross-cut was not driven in 1930. The advisability of resuming work there is pending information expected when the Lower 400 Esperanza Cross-cut is further advanced into the same territory.

Porvenir Adit Cross-Cut

This cross-cut starts at the surface of the Upper 150 level and was advanced 399 feet in 1930. Its total length will be approximately 2,100 feet of which about 1,400 feet are still lacking to connect with the desired point inside the mine. The Porvenir Cross-cut has a three-fold objective, namely: exploration of territory into which the Culebra and South San Miguel veins may extend as well as some surface showings of other veins; shortening of the distance between the surface and the Esperenza section of the mine by about 2,250 feet, thereby reducing by that much for haulage and pipe lines the time of entry to and exit from working places of labor, etc., and aiding ventilation. The release of 2,250 feet of 6″ and 4″ pressure pipe for other uses when this adit is placed in service, will help materially in offsetting its cost.

Upper 150 West Cross-cut

The advance made in this cross-cut in the past year was 1,122.5 feet. Approximately 1,900 feet still have to be driven to connect with the surface on the northwestern slope of the mountain range. To expedite this work, a tunnel is to be started from the outside to meet the one now being driven from the inside.

As explained in previous reports this cross-cut, besides serving to explore the territory between the West and Southwest veins and the surface, will tap a new and cheaper source of timber supply as

well as furnish additional water for power purposes in the dry season. It will also serve as a means of easy access to a large unexplored and at present most inaccessible section of the surface of the property where several vein exposures are said to exist.

Exploration of the Southern Section of the Mine

Exploration southward, which has been continuous for nearly 20 years and which, so far, has already yielded the Esperanza group of veins, as the Salvador, Independencia, Santa Fe and others, has now reached a distance underground where, if such exploration is to be continued much farther into the southern territory in the search for new veins, the problem of ventilation must first be settled. The unexplored southern territory, at more or less the Upper 150 ft. level elevation (about 6,000 feet) extends southward some 20,000 feet or more and is from 8,000 to 10,000 feet east and west having an average depth below the apex of the mountain range of from 800 to 1,500 feet. The present headings of the most southerly Esperanza exploration cross-cuts have now advanced so far from the source of ventilation that unless this is provided it will soon be impossible to continue driving any of these cross-cuts at a speed commensurate with the ore depletion rate of the mine, particularly at present silver prices. Artificial ventilation, mechanically produced, combined with natural ventilation obtained by air raises, should make it possible to continue the present Esperanza exploration cross-cuts into this southern territory, 5,000 feet or more.

Another means of exploring this southern section of the property, and which was considered in former years, would be to stop some of the exploration through the present Esperanza cross-cuts and instead drive a tunnel from the surface in a southwesterly direction into this section. It would start southeast of the present Esperanza workings and from either the Rio San Juancito or the Escobales gulches, be from 3,500 to 4,000 feet long at the Upper 150 ft. level elevation, and be projected under the highest portion of the mountain range from where exploration southward and also that toward the Esperanza territory could proceed at the same time. Besides serving the purpose just mentioned, this tunnel would also explore the intervening ground between its portal and the top of the range for any east and west veins which may exist in the vicinity.

Further investigation is to be made of the best means to be adopted for the continuation of fairly quick exploration of the southern section of the property.

MINE EQUIPMENT

Air Compressors

The two large electric driven air compressors, each of about 2,120 cubic feet per minute free air capacity, and installed in 1908, have continued to render satisfactory service. The motors are of the induction type, have a low power factor and are inefficient when compared with a modern synchronous type motor now universally used for this purpose. So long, however, as the matter of sufficient power for operating the entire property does not become too pressing it would not pay to effect a change, as the compressors and present motors are still good for several years' more work. The third compressor, of about 950 cubic feet free air per minute capacity, was installed in 1924. It is of modern type and has rendered very satisfactory service.

It was necessary to replace all the piping inside the intercoolers of the two large machines, this being the only expenditure above the normal in maintenance of this plant.

A cooling tower is being erected to assure a cleaner and larger volume of cooling water for this plant.

Machine and Blacksmith Shop (Peña Blanca Level)

As explained under a subsequent heading it was decided to defer merging this shop with that at Rosario. In the past year a new drill sharpening machine was installed, the gas producer is being overhauled and the forges have been remodeled and moved to more advantageous locations in the shop.

Underground Pipe Lines

The 10 inch pipe line, 3,300 feet long, which is the main feeder to several miles of smaller pipe in supplying compressed air to the working places underground is not in very good shape and in the past year represented an appreciable item of expense for replacements and repairs. Installation of a new pipe, however, is not recommended until connection is effected by the Porvenir Adit tunnel with the Esperanza country workings whereby the distance and also the length of pipe line will be shortened by about 2,300 feet. The connection in question with the Esperanza country should be completed in about two years.

THE MILL

Tonnage Crushed

	1930	1929
Total wet tons received	120,496.08	127,050.12
Average per cent. moisture	9.758	10.034
Total dry tons milled	108,480	113,920
Average tons per day milled (365 days)	297	312
Average tons per day milled, full running time	363	370
Average tons per day milled, per 1850-lb. stamp	18.2	18.5
Number of 1850-lb. stamps	20	20
Total tons treated by present mill, to December 31, 1930	1,920,808	1,812,328

Recovery

	1930	1929
Average ounces silver received per ton	29.903	23.624
Total ounces silver received	3,243,867	2,691,236
Average ounces silver recovered per ton	27.258	21.735
Total ounces silver recovered	2,957,156	2,476,124
Average silver recovered, per cent.	91.15	91.820
Average ounces gold received per ton	.1306	.0941
Total ounces gold received	14,167	10,720
Total ounces gold recovered per ton	.1251	.0904
Total ounces gold recovered	13,571	10,304
Average gold recovery, per cent.	95.79	96.06

Supplies Used

	1930	1929	1930	1929
			Per oz. fine bullion produced	
	Per ton of ore crushed		Grade of Ore	
	108,480 Tonnage	113,920	Ag. 29.903 Au. .1306	Ag. 23.624 Au. .0941
Cyanide (100% K.C.N.)	5.769000 lbs.	4.100342	.210679	.188982 lbs.
Steel balls	.208850 "	.610121	.007627	.028120 "
Zinc Dust	.938514 "	.796471	.034274	.036709 "
Muriatic Acid	.046644 "	.026308	.001703	.001213 "
Lime	13.213947 "	7.879152	.482563	.363145 "
Pebbles, Foreign	.956342 "	.104003	.034925	.004751 "
Borax Glass	.050234 "	.048376	.001835	.002229 "
Soda	.003687 "	.008515	.000135	.000392 "
Fuel Oil	.046718 gal.	.024877	.001706	.001147 gal.
Tube Mill Rock	59.403654 lbs.	58.277738	2.169337	2.685983 lbs.
Sulphur	2.827710 "	2.642205	.103266	.121778 "

Ore Analysis

	1930	1929	1928	1927	1926	1925
Silica (SiO^2)	71.36%	73.98%	74.15%	73.63%	75.61%	72.98%
Alumina (Al_2O_3) ...	9.76%	10.00%	13.57%	11.17%	3.94%	3.72%
Iron (Metallic)	4.03%	3.84%	3.45%	2.96%	3.47%	3.12%
Manganese	0.64%	0.48%	0.83%	0.74%	0.97%	0.72%
Lime (CaO)	0.90%	0.68%	0.57%	0.57%	0.57%	0.60%
Magnesia (MgO) ..	1.72%	1.84%	0.49%	0.77%	1.08%	1.37%
Zinc	1.64%	0.49%	0.50%	0.46%	0.87%	1.38%
Antimony	0.009%	0.016%	Trace	0.06%	0.016%	Trace
Arsenic	0.012%	0.021%	0.04%	0.03%	0.01%	Trace
Lead	0.37%	0.27%	0.29%	0.22%	0.17%	0.19%
Sulphur	1.83%	1.60%	1.25%	1.12%	1.56%	1.33%

Treatment Period Detail

	1930				1929			
	Hrs.	Min.	Ag. %	Au. %	Hrs.	Min.	Ag. %	Au. %
Extraction by Crushing Solution	9	00	31.25	81.09	10	00	32.65	81.62
Extraction by Agitation....	89	34	60.76	14.85	79	02	59.85	15.09
Extraction in Slime Presses	1	05	.33	.77	1	03	.09	.10
	99	39	92.34	96.71	90	05	92.59	96.81
Less Dissolved Value Loss.			1.18	.92			.77	.75
Recovery			91.16	95.79			91.82	96.06
Percent sand not passing 150 mesh			16.515				19.20	

Recovery

The new installations and changes effected and described below were completed towards the end of 1930 and should result in getting silver recovery back to around 92% as compared with 91.15%, the 1930 average.

Improvements and Additions

In conformity with plans already advised in previous reports, two additional high agitation tanks were installed, there now being 12 of these units in service as compared with six when the Mill was first built. This installation has proved of material benefit in permitting an increase in the daily milling rate without at the same time causing a corresponding drop in the silver extraction.

The 4 feet x 10 feet ball grinding mill was replaced by a 5 feet x 22 feet pebble tube mill. While some 35 H. P. more is needed to drive this larger mill, the advantage gained is that a better grinding effect is obtained and the grinding medium, which is local mine rock and ore, costs nothing as compared with expensive steel balls for the ball mill.

The capacity of the two Merrill Slimes Filter Presses was increased about 10% by addition of more filtering media so that the anticipated increased daily milling tonnage and higher value solutions continue to have the same period of press treatment as before.

To assure a larger flow of cyanide solution to the batteries and thereby help in raising the daily milling tonnage, a new 8 inch diameter pipe line 350 feet long was installed in addition to the one currently in use.

An electrically driven sand pump was installed to replace the air lifts used for many years in elevating the Mill pulp. The advantage gained is less power used, better control of the pulp and less frequent Mill shut-downs due to the air lifts becoming plugged.

Cyanide Recovery Process

The sulphur dioxide process continued operating satisfactorily and is effecting an important saving in cyanide. Owing to some deteriorations due to acid some of the equipment will have to undergo quite extensive repairs in the coming year.

General

The principal object in making the various additions and changes as described above was for the purpose of increasing the crushing and the treatment capacity without at the same time sustaining a substantial drop in silver recovery. It is believed that this object has been attained and that, therefore, assuming normal operating conditions in 1931, a larger ore tonnage can be crushed and treated without a corresponding drop in silver recovery.

There is a possibility that if the treatment area were further increased a still better silver recovery would be obtained. Whether the net profit on the additional product thus obtained would be sufficient under present silver prices to offset the cost of installation within reasonable time is to be determined in the coming year.

POWER

Rainfall	1930	1929	1928
Total Rain, Inches	34.71	58.28	70.24
Number of Rainy Days	181	192	211
Greatest Monthly Rainfall	5.64 (June)	12.36 (Oct.)	19.62 (June)
Lowest Monthly Rainfall	.82 (Nov.)	.44 (April)	1.11 (March)
Greatest Single Rainfall	2.00 (Sept.)	2.24 (May)	3.06 (June)

POWER DISTRIBUTION

	1930		1929	
	Kilowatt Hours	K.W.Hours Per Ton	Kilowatt Hours	K.W.Hours Per Ton
Mine Power	2,315,840	21.348	3,365,250	29.540
Electric Haulage	252,000	2.323	393,000	3.450
Blacksmithing	27,400	.252	8,000	.070
Mine Lights	21,000	.193	20,800	.183
Hoisting	10,500	.097	.....	.....
Mill Power	3,139,160	28.938	3,151,550	27.665
Mill Lights	24,600	.227	24,000	.211
Surface Lights	36,500	.336	27,600	.242
Surface Power	124,500	1.148	118,000	1.036
Machine Shop	28,400	.262	27,400	.240
Laboratory	12,000	.111	6,000	.053
Totals	5,991,900	55.235	7,141,600	62.690
Power Production by				
San Juancito Plant	60.83%		55.84%	
Guadalupe Plant	39.17%		44.16%	

COST OF POWER PRODUCTION

	1930			1929		
	Amount	Per Ton	K.W.Hr.	Amount	Per Ton	K.W.Hr.
Labor	$ 9,486.00	.08744	.001583	$ 9,438.76	.0829	.001322
Supplies	3,196.92	.02947	.000534	4,277.27	.0375	.000599
Totals	$12,682.92	.11691	.002117	$13,716.03	.1204	.001921

Based on Horsepower Generated:

	1929	1928
Horsepower Hours	$8,029,146	$9,753,190
Cost per Horsepower Hour	$ 0.001579	$ 0.001433
Cost per Horsepower Year	$ 13.832	$ 12.5531
Cost per Horsepower Year, Increase	$ 1.28	$ 1.04

New Hydro-Electric Plant
(Aguacatal)

The lack of sufficient rain in the latter part of the year, or wet season, affected operations adversely, there being power shortage periods requiring curtailment in milling tonnage in September, November and December. Records show that while rainfall in recent years has been decreasing, the demand for more power due to addition of equipment for increased operations, has been increasing. The extra power made available in 1926, when both the San Juancito and Guadalupe Plants were reconstructed and brought up to modern efficiency and increased capacity, has all been absorbed and now, in order not to curtail operations, it is necessary to operate the San Juancito Plant at as much as 200 K.W. overload during peak power demands. While the San Juancito electric generators can take this extra load for several hours the water wheel equipment is overloaded and does not function as efficiently as it should. To avoid this to the extent of reducing to a safer point the overload on the San Juancito Plant and also increase the present power resources, construction of the Aguacatal Hydro-Electric Plant was started in December. This plant will be of about 350 K.W. capacity in the wet season and should yield 100 to 125 K.W. in the dry. It is located about 10 feet above the Aguacatal Dam intake which is one of the main sources of water supply for the present San Juancito Plants. However, instead of this water running idly down the gulches to this dam, as is the case at present, it will first be impounded at a vertical elevation of about 800 feet above the dam, passed through 1,500 feet of 16-inch and 18-inch steel penstock and converted into power by the new plant under an effective head of around 790 feet. A very important point to consider in this installation is that while by its means a generating capacity of about 350 K.W. is added to the present generating system, this will be obtained without any addition of water whatsoever. In other words, a portion of the same water

now supplying the San Juancito and the Guadalupe Plants will first be impounded at an elevation of 800 feet before entering these plants.

Another important point, that from the standpoint of operating economy, is that the Aguacatal Plant equipment is automatically controlled, therefore no operators are required. Starting, stopping and synchronization with the main circuit will be effected entirely by remote control from the Rosario Mill Substation, about a mile away, where there is a switchboard operator on duty throughout the 24 hours.

Transmission Lines

The work of changing all the high voltage transmission lines from wooden poles to galvanized steel poles was concluded in the latter part of the year. This installation not only decreases interruptions for repairs to a minimum, but now permits reduction in the number of employees on line work.

General

No important additions or replacements to the present wooden flume lines supplying water to the two power plants were effected in the past year, sufficient repair work, however, being done to maintain an uninterrupted water supply to the plants. It will soon be necessary to replace the Escobales Flume, about 9,650 feet long. The lumber for most of this is already on hand and it is expected that construction will commence some time in the rainy season and after the Aguacatal Plant is in service.

NEW GENERAL OFFICE

Construction of the new General Office building, to replace the one built in 1912 and destroyed by fire in January, 1929, was completed and the building occupied in August. The new building is on the same site as the old one and is slightly larger, being constructed throughout of lime-mortar, stone masonry and reinforced concrete instead of entirely of wood as was the old building.

It is believed that the additional cost in constructing this building of masonry and concrete instead of wood, is more than offset by the now greater security against fire and other dangers to records, legal documents, and the funds, to say nothing of valuable engineering data accumulated at great expense over the past 50 years and a good deal of which is irreplaceable.

OTHER DEPARTMENTS
Mechanical Department

A small direct driven high pressure air compressor of 530 cubic feet capacity was installed to supply the machine shop with high pressure air for pneumatic tools as well as to serve similar air

needs in the Mill and portion of the lower mine workings. Until better silver prices permit resumption of operation on a larger scale in the lower sections of the Mine, it has been decided to maintain the Mine Department Shops at the Pena Blanca and not combine these with the main shop at Rosario as outlined in the 1929 report.

In the past year this department installed in the Mill two new Pachuca tanks, a 5-foot x 22-foot tube mill, the air compressor mentioned, besides keeping in repair all other principal mechanical equipment on the property. No additions to the Machine Shop, excepting of a minor nature, will be necessary for some time.

Medical Department

	1930	1929
Cost of Maintenance	$ 7,678.39	$ 6,342.27
Total consultations, examinations and treatments	10,073	11,637

There was added during 1930 to the equipment of this department one latest type Victor X-Ray apparatus complete with all necessary extras such as photographic attachment, developing tanks, etc. In the native hospital ward new beds, bed equipment and chairs were installed. With a photograph and health record of each employee, which is brought to date with periodic examinations, it is felt that a better record of employees' general health is available than ever before.

Assay Office and Laboratory

	1930	1929
Total number of assays run	17,271	19,234
Average number of assays per day	47	53
Total cost	$ 6,303.90	$ 5,218.52
Cost per assay	0.36	0.27

The higher total operating cost of this department is due to extra personnel during absence on salary of the regular assayer, the higher cost per assay being largely due to there having been run about 2,000 assays less than in 1929.

Schools

Average daily attendance during year:

	1930	1929
Boys' School	106	142
Girls' School	120	127
Total expense (San Juancito Schools)	$ 8,574.10	$ 7,971.19
Rosario School expense	1,435.47	1,220.00
Total expense—Rosario and San Juancito	$10,009.57	$ 9,191.18

The increased cost in the maintenance of the Boys' and the Girls' Schools in San Juancito is largely due to an increase in the salaries of the teaching staff decreed by the Municipality of Tegucigalpa within whose jurisdiction the Rosario property is. The advisability of installing a branch Mixed School at Rosario is being studied by the Municipal authorities with the probability that such a school with two or three teachers will be started in the 1931 school year.

Police and Garrison

	1930	1929
Total maintenance expense	$16,217.88	$ 9,826.60
Increase	6,391.28	

The difficulties which had their inception in the latter part of 1928 culminated in January 20, 1930, in the assassination of two members of the foreign staff, the wounding of a third and also of a native employee. For better protection both to life and property it was arranged with the Honduran authorities to replace the former military garrison outpost at Rosario, manned by local conscripts and subject to the San Juancito garrison commandant in his quarters over two miles away, by an increased and voluntary police force of 20 selected men, all non-former employees, in charge of a chief directly responsible to the Tegucigalpa police authorities and the Government.

This measure, as also the extra expense involved in efforts to apprehend the criminals throughout the year, represents the major portion of the $6,391.00 increase in the maintenance of the Police and Garrison Department. It can be reported that during 1930, as a result of this change, losses by theft have much decreased and appreciably better law and order prevails at the Rosario settlement and district.

Hotel

	1930	1929
Total number of meals served	32,565	30,335
Total cost	$18,139.14	$16,712.32
Cost per meal	0.555	0.55

Roads

	1930	1929
Total maintenance	$ 7,717.52	$ 7,746.75
Decrease	29.23	

Agencies

	1930	1929
Total expense	$ 4,055.44	$ 4,028.87
Increase	26.57	

EXPANSION

Libano Mine (Republic of Costa Rica)

This property, on which an option was obtained in 1930, consists of a group of low grade gold bearing veins. One of these in the past produced a substantial body of gold ore, for exploitation of which a hydro-electric plant and a 50-ton mill and cyanide plant was installed. This ore body occurs at a depth below the surface at which none of the adjacent veins have as yet been explored. The exploration work, therefore, consists in opening up the deeper reaches of some of the most promising adjacent veins to learn if equally favorable ore conditions occur at depth. As yet no decisive results have been obtained to say whether this property should be acquired or not.

Other Mining Projects (in Honduras)

Moloncosa (El Corpus)

A lease was given to a prospector to work a rich stringer on this property with the possibility that he may make a small shipment of high grade gold ore for treatment at Rosario.

Moramulca

No work was done on this zone in the past year, but it is possible that a re-examination of this property will be made in the latter part of the coming year.

CONCLUSIONS

Despite the suspension of operations due to local difficulties in January and February and frequent setbacks due to power shortage in what proved to be the driest year on record, the 1930 silver production was the largest in the history of the Company, that of gold being the greatest since 1915.

The recession in the price of silver, from an average of 51 1/3 cents in 1929 to 35 cents in 1930, necessitated corresponding adjustments to operations. This was particularly true in the Mine, where radical changes had to be made to supply a larger tonnage of considerably better grade ore from fewer veins without at the same time effecting material curtailment in exploration and development or increasing operating expenditures.

As an operating basis for 1931 an average of 30 cents per Troy ounce of silver is assumed, the scale of operations as to ore tonnage milled, bullion output, exploration and other items to be more or less equal to those of 1930.

In a situation with so many uncertainties as the present one a closer approximation of the present potentiality of the enterprise is desirable. It is mostly for this reason that the ore reserves

herein reported are based on 30 cent silver and divided into active and inactive reserves, the active reserves being the only ones which can be exploited while present silver market conditions obtain.

If any credit can be given for what has been accomplished in the past year, this is largely due to the faithful service of the local staff and the confidence and full support received from you and the gentlemen of the Board.

Respectfully submitted,

General Manager.

Annex "A"

Active Ore Reserves

CALCULATED RESERVES (13 cu. ft. per ton)	Av. width, feet			Tons of ore plus waste	Average ounces per ton		Total ounces	
	Vein	Waste	Stoping		Ag.	Au.	Ag.	Au.
Independencia Group	2.3	1.7	4.0	26,000	40.	.19	1,040,000	5,050
Salvador Group	2.4	1.6	4.0	65,000	30.	.13	1,950,000	8,400
San Benito	1.4	1.5	3.0	25,000	27.	.17	675,000	4,150
Sante Fe	2.9	1.5	4.5	65,000	32.	.15	2,080,000	10,000
TOTALS				181,000	31.74	.1524	5,745,000	27,600
BROKEN ORE IN STOPES								
(21 cu. ft. per ton) Veins								
Culebra Sub Level				2,350				
Independencia				8,376				
Northwest				1,215				
Socorro				870				
Salvador				15,849				
San Benito				3,885				
San Luis				720				
South San Miguel				1,620				
Colonia Chute				300				
Chute No. 2				100				
Mill Bin				878				
TOTAL				36,163	28.	.12	1,012,564	4,340

Summary—Active Reserves

Calculated Ore at 13 cu. ft.	181,000	31.74	.1524	5,745,000	27,600
Broken Ore in Stopes, at 21 cu. ft.	36,163	28.	.12	1,012,564	4,340
TOTAL ACTIVE RESERVES AS OF JAN. 1, 1931	217,163	31.12	.1471	6,757,564	31,940

Annex "B"

Inactive Ore Reserves

CALCULATED RESERVES (13 cu. ft. per ton) Veins	Av. width ft.	Per cent waste	Tons of ore plus waste	Ounces per ton Ag.	Au.	Total ounces Ag.	Au.
Carmen	1.8	50	10,000	16.	.030	160,000	300
Fortuna Group	1.3	50	12,000	16.	.040	192,000	480
San Luis	1.8	40	4,000	22.	.060	88,000	240
Culebra	1.7	50	8,700	16.	.050	139,200	435
North San Miguel	1.6	35	4,800	15.	.060	72,000	288
San Joaquin	1.0	60	9,500	15.	.120	142,500	1,140
Santa Gertrudis	1.0	70	5,000	22.	.030	110,000	150
South San Miguel Group	1.5	40	20,000	17.	.060	340,000	1,200
South West	1.5	40	8,000	18.	.040	144,000	320
TOTALS			82,000	16.92	.0555	1,387,700	4,553
ESTIMATED RESERVES (13 cu. ft. per ton) Veins							
Buena Ventura			1,500	12.	.06	18,000	90
Candelaria Group			5,000	12.	.06	60,000	300
Capitana			3,000	10.	.13	30,000	390
Catalina			3,000	14.	.05	42,000	150
Colonia			2,000	14.	.07	28,000	140
Esperanza			1,500	15.	.05	22,500	75
Guadalupe			1,000	12.	.03	12,000	30
Jacuara			2,000	12.	.05	24,000	100
North			1,000	14.	.05	14,000	50
Northwest			2,000	14.	.05	28,000	100
Nueva			1,500	12.	.05	18,000	75
Porvenir			2,000	13.	.05	26,000	100
Rosario			5,000	12.	.06	60,000	300
Socorro			1,500	14.	.05	21,000	75
West			2,000	13.	.03	26,000	60
TOTALS			34,000	12.63	.0598	429,500	2,035

Summary—Inactive Reserves

Calculated Ore, at 13 cu. ft.	82,000	16.92	.0555	1,387,700	4,553
Estimated Ore, at 13 cu. ft.	34,000	12.63	.0598	429,500	2,035
TOTAL INACTIVE RESERVES, AS OF JAN. 1, 1931	116,000	15.67	.0567	1,817,200	6,588

Annex "C"

Exploration and Development for the Year 1930

Veins and Groups	Drifts	Cross-Cuts	Raises	Winzes	Total Feet
Carmen	....	....	6.5	....	6.5
Culebra	....	....	8.0	....	8.0
Independencia	1,255.0	387.0	1,167.0	....	2,809.0
Independencia (San Blas)	74.5	....	....	....	74.5
Salvador	1,342.5	424.5	985.5	....	2,752.5
Salvador (Fortuna)	141.0	95.5	33.0	....	269.5
Salvador (Vein No. 4)	41.0	....	....	....	41.0
Santa Fe	3,657.0	506.5	3,132.0	....	7,295.5
Santa Fe (San Benito)	1,481.5	371.0	1,081.0	....	2,933.5
S. San Miguel Group	49.5	8.0	53.0	....	110.5
Esperanza Crosscuts					
U. 150 No. 1 S. W.	....	69.0	....	....	69.0
U. 150 No. 2 S. E.	....	70.5	....	....	70.5
L. 200	....	17.5	....	....	17.5
L. 300	....	622.0	....	....	622.0
L. 400	....	746.0	....	....	746.0
L. 450	....	113.0	....	....	113.0
L. 500	....	457.5	....	....	457.5
Esperanza Raises					
U. 150 Ventilation	....	36.0	307.0	31.0	374.0
L. 400 Manway	....	....	24.5	....	24.5
L. 500 Manway	....	....	37.0	....	37.0
Other Crosscuts					
U. 150 Porvenir Adit	....	399.0	45.0	....	444.0
U. 150 West	....	1,122.5	....	....	1,122.5
L. 300 Jucuara	....	404.0	....	....	404.0
Miscellaneous					
Station Crosscuts	....	528.0	....	....	528.0
TOTALS	8,042.0	6,377.5	6,879.5	31.0	21,330.0
Cutoffs	....	188.5	....	....	188.5
GRAND TOTAL	....	....	....	....	21,518.5

ORE PRODUCTION

Annex "D"

From Stoping Operations

Veins	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Fortuna } Group	206	....	366	423	392	553	457	445	1,441	857	172	2	5,314
Veta No. 4 } Group	....	....	88	351	....	....	....	....	....	....	....	....	439
Independencia Group	544	....	1,160	1,039	1,162	1,783	2,211	2,003	780	1,340	1,515	1,786	15,323
Northwest	....	....	37	....	....	....	....	....	....	....	69	239	345
Salvador Group	1,018	....	1,971	2,003	1,448	2,096	2,466	2,025	1,877	2,576	1,866	2,284	21,630
Santa Fe	186	....	709	823	672	1,011	1,392	1,141	1,821	2,016	2,158	2,961	14,890
San Benito	371	....	502	422	749	1,159	957	1,276	1,162	1,389	1,577	1,657	11,221
S. San Miguel Group	32	....	67	130	....	....	....	....	....	....	....	....	229
TOTALS	2,357	....	4,900	5,191	4,423	6,602	7,483	6,890	7,081	8,178	7,357	8,929	69,391

From Development Excavations

Carmen	59	....	....	....	....	....	....	....	....	....	....	....	59
Fortuna	6	....	....	....	....	....	....	....	....	....	....	....	6
Independencia Group	289	....	697	873	809	410	371	437	972	540	518	968	6,884
Salvador Group	666	....	536	325	372	231	306	412	245	446	636	558	4,733
Santa Fe	1,679	....	2,640	2,408	1,913	2,858	2,359	2,197	571	966	1,258	904	19,753
San Benito	189	....	544	804	690	841	749	662	1,765	965	267	339	7,815
S. San Miguel Group	79	....	18	....	....	....	....	....	....	....	....	....	97
TOTALS	2,967	....	4,435	4,410	3,784	4,340	3,785	3,708	3,553	2,917	2,679	2,769	39,347
GRAND TOTALS	5,324	....	9,335	9,601	8,207	10,942	11,268	10,598	10,634	11,095	10,036	11,698	108,738

Annex "E"
TONNAGE MINED
From October 1, 1907 to January 1, 1931

	Total including Stoping, Devel. & Filling Oct. 1, 1907 to Dec. 31, 1929	Total including Stoping, Devel. & Filling Year 1930	Grand total including Stoping Devel. and Filling Jan. 1, 1931
Buena Ventura	98,490	....	98,490
Candelaria Group	166,573	....	166,573
Capitana	54,268	....	54,268
Carmen	18,306	59	18,365
Catalina	6,587	....	6,587
Colonia	56,438	....	56,438
Concepcion	19,170	....	19,170
Crisanta	7,410	....	7,410
Culebra	104,128	....	104,128
Esperanza	8,710	....	8,710
Fortuna Group	70,155	5,320	75,475
Guadalupe	61,177	....	61,177
Independencia	117,449	22,207	139,656
Jucuara	2,212	....	2,212
North	4,647	....	4,647
Northwest	88,877	345	89,222
Nueva	28,147	....	28,147
Porvenir	1,711	....	1,711
Rosario	150,915	....	150,915
Salvador Group	272,531	26,363	298,894
San Benito	13,363	19,036	32,399
San Blas	5,052	....	5,052
San Joaquin	63,030	....	63,030
San Luis	2,002	....	2,002
San Miguel North	174,801	....	174,801
San Miguel Group	119,409	326	119,735
Santa Fe	20,238	34,643	54,881
Santa Gertrudis	30,789	....	30,789
Socorro	21,964	....	21,964
Southwest	20,509	....	20,509
Termópilas	1,094	....	1,094
West	97,005	....	97,005
Veta No. 4	4,562	439	5,001
Ore from Development	63,599	....	63,599
Miscellaneous	3,315	....	3,315
Totals	1,978,633	108,738	2,087,371

Summary
From October 1, 1907 to January 1, 1931

From Stoping	1,630,764
From Development	223,207
From Fills	233,400
Total	2,087,371

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NEW YORK AND HONDURAS ROSARIO MINING COMPANY

Annual Report

for the Year Ended December 31, 1931

submitted by

President Lewis L. Clarke

at the

Annual Meeting of the Stockholders

April 6, 1932

April 6, 1932.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company.

It is with a great deal of pleasure that I submit to you the following facts concerning the business of your Company for the year 1931.

The production of silver and gold has been showing a progressive increase since the year 1927. In 1931 we produced 3,689,790 ounces silver and 15,835 ounces gold. The increase over 1930 in silver produced was 732,670 ounces, and of gold, 2,337 ounces. It should be stated that, in view of the low price of silver, it is essential to increase our production in order to maintain a satisfactory dividend position.

Although the price per ounce realized for silver for the last months of 1931 has shown an appreciable gain over the extremely low figures of the early part of the year, the average sale value realized for the entire year was $.29155 as compared with $.3506 for the year 1930, a difference against the year just closed of $.05905. We were fortunate, however, in the fact that the cost per ounce of silver produced for the year 1931 was $.02359 less than in 1930.

The profit for the year 1931 carried to Surplus is $399,550.40. From the earnings of 1931 there have been paid dividends amounting to $375,000, or, at the rate of $1.87½ per share of the par value of $10.00.

Our net profit from operations before the deduction of Federal Income Taxes, Expansion expenses and Reserves, was $336,286.07; income derived from investments was $134,805.39; a total of $471,-091.46, our mining operations thus contributing 71.38%, and income from investments 28.62%.

In order to provide additional power for mining operations during the dry season, there was installed in the year 1931 a new power plant at a cost of $56,625. The reasons for the installation of this plant and the results it was expected to produce were given in the General Manager's report for the year 1930. The plant was not put into active operation until the early part of this year, and the results already secured indicate that it will have a beneficial effect upon our production.

During the year your Company has investigated a number of new properties in the Central American countries, and some of them are still under consideration.

Beginning in June, 1930, your Board of Directors has been acquiring by purchase in the open market shares of our Company's stock. Up to December 31, 1931, there had been purchased 8,042 shares. Since that date, there have been bought 1,400 shares, making our entire holdings of the New York & Honduras Rosario Mining Company stock 9,442 shares.

It does not seem necessary to recount in detail the efforts that are being made by those interested in the silver mining industry to employ all possible means to protect the interests of *Silver* as an essential element in world commerce and exchange, as the developments in this question are being constantly presented through the daily press.

There is submitted as a part of this report a Comparative Statement for the years 1931-1930 of the outstanding items of our annual operations, an Income and Profit and Loss Statement for the year ended December 31, 1931, a Condensed Balance Sheet as of December 31, 1931, and a Comparative Condensed Statement of Assets and Liabilities for the years 1931-1930.

Our relations with the Government of Honduras have been of a helpful and cordial character, and in your name it is my pleasure to extend to the Government and people of Honduras our sincere felicitations.

LEWIS L. CLARKE,
President.

Comparative Statement of Operations For the Years 1931-1930

	Year 1931	Year 1930	Increase *Decrease
Total Sales Value of Gold and Silver Recovered	$1,403,104.20	$1,315,821.38	$ 87,282.82
Tons of Ore Milled	131,900.00	108,480.00	23,423.00
Ounces of Silver Recovered	3,689,790.76	2,957,119.98	732,670.78
Number of Ounces of Silver Recovered per ton of Ore	27.97415	27.2595	.71465
Ounces of Gold Recovered	15,835.597	13,498.365	2,337.232
Sales Value of Silver Recovered	1,075,782.43	1,036,810.24	38,972.19
Average Sales Value of Silver per Ounce	.29155	.3506	*.05905
Average Cost of Silver per Ounce	.20041	.2240	*.02359
Average Profit on Silver per Ounce	.09114	.1266	*.03546
Total Sales Value of Gold Recovered	327,321.77	279,011.14	48,310.63
Value of Gold per Ounce	20.67	20.67	—
Value of Silver Recovered per Ton of Ore	8.1561	9.5576	*1.4015
Average Cost of Silver per Ton of Ore	5.6066	6.1076	*.5010
Average Profit on Silver Recovered per Ton of Ore	2.5495	3.45	*.9005
Value of Gold Recovered per Ton of Ore	2.4815	2.5720	*.0905
Number of Bars of Bullion Shipped from Mine	2,157	1,748	409

Income and Profit and Loss Statement
For the Year Ended December 31, 1931

Production of Gold and Silver			$1,403,104.20
Less: Freight and Expenses on Bullion			80,918.67
Operating Income			$1,322,185.53
Deduct: Operating Expenses			916,654.38
Operating Profit			405,531.15
Deduct: New York Administrative Expenses			69,245.08
Net Profit from Operations			336,286.07
Other Income			134,805.39
			471,091.46
Other Deductions			20,108.31
Net Profit Before Federal Income Tax and Provision for Reserves			450,983.15
Federal Income Tax			29,657.06
Net Profit for Year			421,326.09
Appropriated for Reserves from Earnings:			
Depletion (based on valuation of mine, March 1, 1913)		$ 7,217.93	
Fire Insurance		9,859.46	
Transit Insurance		4,698.30	21,775.69
Profit for the Year Carried to Surplus			399,550.40
Surplus:			
Surplus—January 1, 1931			$2,002,773.03
Deductions—			
Dividends Paid and Provided for	$375,000.85		
Depletion (on appreciation of Mine Valuation)	7,217.92		
Additional Federal Income Tax, 1929	24.51	382,243.28	1,620,529.75
Surplus—December 31, 1931			$2,020,080.15

NOTE—

—During the year 1927 the United States Government authorized a readjustment of our depletion account due to certain new discoveries. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Entries recording depletion on the new discoveries will be made in a supplementary memorandum ledger account wherein is set up the values allowed by the Treasury Department and showing the actual depletion sustained and allowable for each year. These depletion entries are made for income tax purposes only.

Condensed Balance Sheet
December 31, 1931

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion of Mines	2,137,496.47	$ 862,503.53	
Plant, Buildings, Machinery and Equipment	1,751,044.13		
Less: Allowance for Depreciation	1,331,422.72	419,621.41	$1,282,124.94
Current—			
Cash		119,820.34	
Bullion at Smelters and in Transit—Less: Allowance for Expenses		231,551.65	
Broken Ore in Stopes and Mill Bins (at cost)		89,779.10	
Materials and Supplies (at cost)		245,795.19	
*U. S. and Other Marketable Securities (at cost after Reserve) net plus Interest		2,149,356.02	2,836,302.30
Other Assets—			
Sundry Accounts Receivable		14,756.39	
Loans Receivable—Government of Honduras		30,000.00	
Capital Stock of Other Company (Nominal Value)		1.00	44,757.39
Deferred Charges—			
Prepaid Insurance, Taxes and Expenses			215,971.37
TOTAL ASSETS			$4,379,156.00

LIABILITIES

Current—			
Drafts Payable		$ 61,444.38	
Accounts Payable		23,738.33	
Federal Income Tax—1931		29,657.06	114,839.77
Reserves—			
Dividends—Payable January, 1932		75,000.85	
Mine Fire Insurance		98,671.84	
Transit Insurance		38,389.06	
Sabana Grande Honduras Mining Co. Advances.		31,174.33	244,236.08
Capital—			
Capital Stock (Par Value $10.00 per share) Authorized and Issued (200,000 shares)	$2,000,000.00		
Surplus—			
Earned	$1,437,545.51		
Appreciation of Mine Valuation	$1,500,000.00		
Less: Allocated Depletion	917,465.36	582,534.64	2,020,080.15	4,020,080.15
			$4,379,156.00

*Market Value at December 31, 1931—$1,608,887.00

NOTE: No contingent liabilities were reported to us and so far as we could ascertain, none existed.

Comparative Condensed Statement of Assets and Liabilities for the Year 1931-1930

	December 31, 1931	December 31, 1930	Increase *Decrease
‡Current Assets	$2,836,302.30	$2,764,303.10	$71,999.20
Current Liabilities	114,839.77	84,882.39	29,957.38
NET CURRENT ASSETS	2,721,462.53	2,679,420.71	42,041.82
Other Assets	44,757.39	3,222.47	41,534.92
Permanent Assets—Less Depreciation	419,621.41	433,697.41	*14,076.00
Mines, Real Estate and Concessions Less: Depletion of Mines	862,503.53	876,939.38	*14,435.85
Deferred Charges	215,971.37	263,157.54	*47,186.17
	$4,264,316.23	$4,256,437.51	$ 7,878.72
Represented by:			
Reserve—Insurance	$ 137,060.90	$ 122,503.14	$14,557.76
Reserve—Dividends Payable	75,000.85	100,000.00	*24,999.15
Reserve—Sabana Grande Honduras Mining Company advances	32,174.33	31,161.34	1,012.99
Capital Stock	2,000,000.00	2,000,000.00	———
Surplus	2,020,080.15	2,002,773.03	17,307.12
	$4,264,316.23	$4,256,437.51	$ 7,878.72
Ratio of Current Assets to Current Liabilities	24.61 to 1	32.57 to 1	*7.96 to 1

‡Included in the Current Assets are securities stated at market values at December 31, 1930, and at December 31, 1931, at cost less reserve in the net book value of $2,133,106.64 which had a market value at December 31, 1931, of $1,608,887.00.

WE HEREBY CERTIFY that we examined the books of account and record of NEW YORK & HONDURAS ROSARIO MINING COMPANY—NEW YORK CITY, for the year ended December 31, 1931 and, subject to the fact that we did not examine the records at the mine office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at December 31, 1931, and that the related Income and Profit and Loss Statement is correct.

ERNST & ERNST.

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NEW YORK & HONDURAS ROSARIO MINING CO.



FIFTY-SECOND ANNUAL REPORT

NINETEEN HUNDRED AND THIRTY-TWO

REPORT of the
NEW YORK & HONDURAS
ROSARIO MINING CO.

1932

NEW YORK

January 1, 1933

OFFICERS 1933-1934

LEWIS L. CLARKE, *President*

H. A. GUESS, *Vice-President*

A. R. GORDON, *Vice-President*

W. C. LANGLEY, *Treasurer*

J. PERLMAN, *Secretary*

BOARD OF DIRECTORS 1933-1934

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY	DR. J. RALPH JACOBY
LEWIS L. CLARKE	W. C. LANGLEY
H. A. GUESS	M. F. SOTO
IRVING HEIDELL	AMBROSE G. TODD

DR. JULIUS J. VALENTINE

EXECUTIVE COMMITTEE 1933-1934

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY	IRVING HEIDELL
H. A. GUESS	AMBROSE G. TODD

DR. JULIUS J. VALENTINE

LEWIS L. CLARKE, W. C. LANGLEY } *Ex-Officio*

Annual Report of the President of the New York and Honduras Rosario Mining Company for the Year Ended December 31st, 1932

To the Stockholders and Directors of the New York and Honduras Rosario Mining Company: April 1, 1933

This is our Fifty-second Annual Report. May I take advantage of the occasion to felicitate you upon the long life and good fortune our Company has enjoyed, and to present to you another record of annual achievement.

The production of silver for the year 1932 showed a slight increase over the record production of 1931. The figures for 1932 are 3,697,017$^{49}/_{100}$ ounces, compared with 3,689,790$^{76}/_{100}$ for 1931, or an increase of 7,226$^{73}/_{100}$ ounces.

The production of gold for 1932 was 16,054$^{281}/_{1000}$ ounces, compared with 15,835$^{597}/_{1000}$ for 1931, or an increase for 1932 of 218$^{684}/_{1000}$ ounces.

In the year 1932, there was recorded the lowest price for silver known in history, being $.24¼ an ounce on December 29, 1932. The price varied from the highest monthly average of $.30136 in February, 1932, to $.2501 in December, 1932. The variations over the year resulted in our realizing an average price for our product of $.27678 an ounce, as compared with $.29155 for 1931, or a reduction of $.01477 an ounce.

Our operating expenses for the year 1932 were $970,439.22, compared with $916,654.38 for 1931, or an increase of $53,784.84. This was due largely to the fact that we mined a somewhat less favorable grade of silver ore, as indicated by the average cost per ounce of $.2121 for 1932, and $.20041 for 1931, or an increase of $.01169 an ounce.

Our New York Administrative and General Expenses were $64,466.29 for 1932, compared with $69,245.08 for 1931, a decrease of 6.9%.

The Net Profit for the year carried to Surplus was $306,796.98, compared with $399,550.40 for 1931, or a decrease of $92,753.42. This decrease is accounted for principally by the increased expenses of operation at the mine, and the lower price realized for our product. From the earnings of 1932 there have been paid dividends amounting to $1.50 a share, compared with dividends in the year 1931 of $1.875 a share of the par value of $10.00.

Our Net Profit from Operations before the deduction of Federal Income Taxes, Expansion Expenses and Reserves, was $239,134.43. Income derived from Investments was $111,312.85, a total of $350,447.28, our mining operations contributing 68.237%, and income from investments 31.763%. It should also be explained that the amount credited to other income in 1931 included $9,527.50 representing dividends on New York and Honduras Rosario Mining Company stock owned by the Company. We have omitted such dividends realized in 1932, from our income from investments, as they are more properly a surplus credit.

In my reports for the years 1928, 1929, 1930 and 1931, I have called attention to the considerable proportion of our earnings derived from the income from our investments. Beginning with the year 1920 and including the year 1932, we have realized from our investments $911,235.32 in the form of interest and dividends, and $103,862.04 net profits from sales of securities, or a total of $1,015,097.36. For your information there is submitted as a part of this report a list of the securities owned by the Company.

There is also submitted a Comparative Statement for the years 1932-1931 of the outstanding items of our annual operations, an Income and Profit and Loss Statement for the year ended December 31, 1932, a Condensed Balance Sheet as of December 31, 1932, and a Comparative Condensed Statement of Assets and Liabilities for the years 1932-1931.

During the year 1932 your Board of Directors has acquired by purchase in the open market 2,975 shares of our Company's stock, making our total holdings 11,017 shares on December 31, 1932. Since the last mentioned date, we have purchased 400 shares, making our total holdings 11,417 on April 1, 1933.

On your behalf I desire to extend our cordial greetings to the Government and people of Honduras, with whom we have enjoyed for more than half a century relationships of continuous good will.

LEWIS L. CLARKE,
President.

Comparative Statement of Operations For the Years 1932-1931

	Year 1932	Year 1931	Increase *Decrease
Total Sales Value of Gold and Silver Recovered	$1,355,117.43	$1,403,104.20	*$47,986.77
Tons of Ore Milled	142,700.00	131,900.00	10,800.00
Ounces of Silver Recovered	3,697,017.49	3,689,790.76	7,226.73
Number of Ounces of Silver Recovered per Ton of Ore	25.90762	27.97415	*2.06653
Ounces of Gold Recovered	16,054.281	15,835.597	218.684
Sales Value of Silver Recovered	$1,023,275.46	1,075,782.43	*52,506.97
Average Sales Value of Silver per Ounce	$ .27678	.29155	*.01477
Average Cost of Silver per Ounce	$ .21210	.20041	.01169
Average Profit on Silver per Ounce	$ .06468	.09114	*.02646
Total Sales Value of Gold Recovered	$ 331,841.97	327,321.77	4,520.20
Value of Gold per Ounce	$ 20.67	20.67	.....
Value of Silver Recovered per Ton of Ore	$ 7.1708	8.1561	*.9853
Average Cost of Silver per Ton of Ore	$ 5.4950	5.6066	*.1116
Average Profit on Silver Recovered per Ton of Ore	$ 1.6758	2.5495	*.8737
Value of Gold Recovered per Ton of Ore	$ 2.3255	2.4815	*.1560
Number of Bars of Bullion Shipped from Mine	2,260	2,157	103

Income and Profit and Loss Statement
New York and Honduras Rosario Mining Company
New York City
For the Year Ended December 31, 1932

Production of Gold and Silver		$1,355,117.43	
Less: Freight and Expenses on Bullion		81,077.49	
Operating Income			$1,274,039.94
Deduct: Operating Expenses			970,439.22
Operating Profit			303,600.72
Deduct: New York Administrative and General Expenses			64,466.29
Net Profit from Operations			239,134.43
Add: Income from Investments, etc.			111,312.85
			350,447.28
Deduct: Mine Expansion Expenses, etc.			10,724.20
Net Profit Before Federal Income Tax and Provisions for Reserves			339,723.08
Deduct: Federal Income Tax			18,304.43
Net Profit for Year			321,418.65
Appropriated for Reserves from Earnings:			
Depletion (based on valuation of Mine, March 1, 1913)	$ 2,958.14		
Fire Insurance	7,258.48		
Transit Insurance	4,405.05		14,621.67
Profit for the Year Carried to Surplus			306,796.98
Surplus:			
Surplus—January 1, 1932		$2,020,080.15	
Additions—			
Adjustment for Depreciation Disallowed by Federal Government as deductible from taxable income		33,054.88	
		2,053,135.03	
Deductions—			
Dividends Paid and Provided for	$300,000.00		
Less: Dividends on Company's Stock held in Treasury	19,141.25	$280,858.75	
Adjustment to reduce Company's Stock held in Treasury to Par Value	18,269.90		
Additional Federal Income Tax Prior Year	99.74		
Depletion (on appreciation of Mines Valuation)	2,958.14	302,186.53	1,750,948.50
Surplus—December 31, 1932			$2,057,745.48

NOTE—During the year 1927 the United States Government authorized a readjustment of our depletion account due to certain new discoveries. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Entries recording depletion on the new discoveries will be made in a supplementary memorandum ledger account wherein is set up the values allowed by the Treasury Department and showing the actual depletion sustained and allowable for each year. These depletion entries are made for income tax purposes only.

Condensed Balance Sheet
New York and Honduras Rosario Mining Company
New York City
December 31, 1932

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion of Mines	2,143,412.75	$ 856,587.25	
Plant, Buildings, Machinery and Equipment	1,765,888.99		
Less: Allowance for Depreciation	1,337,490.19	428,398.80	$1,284,986.05
Current—			
Cash		150,018.65	
Bullion at Smelters and In Transit—Less: Allowance for Expenses		186,652.91	
Broken Ore in Stopes and Mill Bins (at Cost)		103,562.46	
Materials and Supplies (at Cost)		234,766.28	
*Marketable Securities, including U. S. Government Bonds, (at Cost after Reserves) Plus Accrued Interest		2,053,329.87	2,728,330.17
Other Assets—			
Sundry Accounts Receivable		13,289.99	
Loans Receivable—Government of Honduras		28,485.62	
Capital Stock of Other Company (Nominal Value)		1.00	41,776.61
Deferred Charges—			
Prepaid Insurance, Taxes and Expenses			183,628.37
			$4,238,721.20

LIABILITIES

Current—			
Drafts Payable		$ 21,974.39	
Accounts Payable		24,105.70	
Federal Income Tax—1932		18,304.43	$ 64,384.52
Reserves—			
Dividends Payable—January, 1933		47,245.75	
Mine Fire Insurance		105,930.32	
Transit Insurance		42,794.11	
Sabana Grande-Honduras Mining Co. Advances		30,791.02	226,761.20
Capital—			
Capital Stock (Par $10.00 per share) Authorized and Issued (200,000 shares)	$2,000,000.00		
Less: In Treasury (11,017 shares)	110,170.00		
Outstanding ....(188,983 shares)		1,889,830.00	
Surplus—			
Earned	1,478,168.98		
Appreciation of Mines Valuation	$1,500,000.00		
Less: Depletion Earned	920,423.50	579,576.50	2,057,745.48	3,947,575.48
			$4,238,721.20

*Market Value on December 31, 1932—$1,292,814.75

NOTE: No contingent liabilities were reported to us and none were disclosed by our examination.

Comparative Condensed Statement of Assets and Liabilities for the Years 1932-1931

	December 31, 1932	December 31, 1931	Increase *Decrease
*Current Assets	$2,728,330.17	$2,747,206.15	*$18,875.98
Current Liabilities	64,384.52	114,839.77	*50,455.25
Net Current Assets	2,663,945.65	2,632,366.38	31,579.27
Other Assets	41,776.61	44,757.39	*2,980.78
Permanent Assets—Less Depreciation	428,398.80	419,621.41	8,777.39
Mines, Real Estate and Concessions Less: Depletion of Mines	856,587.25	862,503.53	*5,916.28
Deferred Charges	183,628.37	215,971.37	*32,343.00
	$4,174,336.68	$4,175,220.08	*883.40
Represented by:			
Reserve—Insurance	$ 148,724.43	$ 137,060.90	$11,663.53
Reserve—Dividends Payable	47,245.75	71,985.10	*24,739.35
Reserve—Sabana Grande - Honduras Mining Company advances	30,791.02	32,174.33	*1,383.31
Capital Stock (Outstanding)	1,889,830.00	1,919,580.00	*29,750.00
Surplus	2,057,745.48	2,014,419.75	43,325.73
	$4,174,336.68	$4,175,220.08	*$883.40
*Ratio of Current Assets, with Securities at cost, less Reserve, to Current Liabilities	42.38 to 1	23.92 to 1	18.46 to 1
Ratio of Curent Assets, with Securities at Market, to Current Liabilities	30.76 to 1	19.21 to 1	11.55 to 1
Market Value of Securities, not including investment in Treasury Stock	$1,292,814.75	$1,503,335.75	*$210,521.00

Note: For the purpose of comparison, the Current Assets as of December 31, 1931, have been adjusted for Treasury Stock held at that date in the cost value of $89,096.15, and Capital Stock, Dividends Payable and Surplus with relative adjustments.

Securities Held by
New York and Honduras Rosario Mining Company
As of April 1, 1933

BONDS:

Amount	Name
$200,400.00	Liberty Loan 4th—4¼% due 1933-1938.
9,000.00	U. S. Treasury 3⅜%—due 1940-1943.
50,000.00	American Water Works & Electric Co., Inc., Deb. Bonds Series "A" 6%—due November 1, 1975.
25,000.00	Atchison, Topeka & Santa Fé Railway Co. 4% 100 yr. Gen. Mtge. Bond—due October 1, 1995.
50,000.00	Birmingham Gas Co. Gold Notes 6%—due October 1, 1935.
50,000.00	Brooklyn City R'way 1st Cons. Mtge. Bonds 5%—due July 1, 1941.
25,000.00	Chicago & Northwestern Ry. Co. 1st and Refunding Mtge. 4½% —due May 1, 2037.
50,000.00	California-Oregon Power Company Refunding Mortgage Gold Bonds 6½%—due May 1, 1942.
50,000.00	Chicago, Rock Island & Pacific R. R. 1st and Refunding Mtge. 4%—due April 1, 1934.
25,000.00	Cities Service Gas Co. 1st Mtge. Prior Lien Bonds 5½%—due May 1, 1942.
50,000.00	Electric Power & Light Corpn. Gold Debenture Bonds 5%—due February 1, 2030.
45,000.00	Indiana Power Company 1st Lien and General Mtge. Bonds Series "A" 7½%—due November 1, 1941.
60,000.00	Jersey Central Power & Light 30-yr. 1st Mtge. Gold Bonds Series "C" 4½%—due June 1, 1961.
25,000.00	Joplin Water Works Co. 1st Mtge. Series "A" 5%—due March 1, 1957.
5,000.00	Lehigh Power Securities Corp. Debenture Bonds Series "A" 6% —due February 1, 2026.
100,000.00	Mississippi Power & Light Co. 1st Mtge. Gold Bonds 5%—due December 1, 1957.
50,000.00	Monongahela West Penn. Public Service Co. 1st Lien and Refunding Mtge. Gold Bonds Series "B" 5½%—due February 1, 1953.
50,000.00	National Power & Light Debenture Bonds Series "B" 5%—due May 1, 2030.
25,000.00	New Orleans, Texas & Mexico Railway 1st Mtge. Series "A" 5½%—due April 1, 1954.
50,000.00	New York, Chicago & St. Louis R. R. Co. Refunding Mtge. Series "C" 4½%—due September 1, 1978.
50,000.00	St. Louis & San Francisco Ry. Prior Lien Mtge. Bonds Series "B" 5%—due July 1, 1950.
50,000.00	Shell Union Oil Corpn. Deb. Sinking Fund Bonds 5%—due May 1, 1947.
5,000.00	Texas Electric Service Co. 1st Mtge. Gold Bonds 5%—due July 1, 1960.
50,000.00	Tokyo Electric Light Company, Ltd. 1st Mtge. Gold Bonds 6%— due June 15, 1953.
50,000.00	Wisconsin Valley Electric Co. Gold Notes 6%—due June 15, 1933.

PREFERRED STOCKS:

Number of Shares	Name of Stock
400	American Gas & Power Company $6.00 1st Pref. Stock.
1,000	American Smelting & Refining Co. 2nd Pref. Stock 6%, Par $100.
500	American Water Works & Electric Co. 1st Pref. Stock $6.00.
500	Arkansas Power & Light Co. $6 Pref. Stock.
550	Commonwealth & Southern Corp. $6 Pref. Stock.
500	Florida Power & Light Co. $7 Pref. Stock.
500	Iowa Southern Utilities Co. of Delaware 7% Pref. Stock, Par $100.
500	Jersey Central Power & Light Co. 5½% Pref. Stock, Par $100.
500	Louisiana Power & Light Co. $6 Pref. Stock.
1,300	National Power & Light Co. $6 Pref. Stock.
500	Ohio Edison Company $6 Pref. Stock.
200	J. C. Penney Company 6% Pref. Stock, Par $100.
500	Potomac Edison Company 6% Pref. Stock, Par $100.
500	Public Service Co. of Indiana Prior Lien 7%, Par $100.
500	West Penn. Electric Company 6% Pref. Stock, Par $100.

COMMON STOCKS:

1,000	American Chicle Company.	
600	Home Insurance Company.	
TOTAL COST		$2,063,389.09
Market Value, March 31, 1933		$1,073,838.88

WE HEREBY CERTIFY that we examined the books of account and record of NEW YORK & HONDURAS ROSARIO MINING COMPANY—NEW YORK CITY, for the year ended December 31, 1932 and, subject to the fact that we did not examine the records at the mine office in Honduras, it is our opinion that the annexed Balance Sheet shows the financial condition of the Company at December 31, 1932, and that the related Income and Profit and Loss Statement is correct.

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Table Showing

Bullion Production — Distribution to Stockholders

1882	$2,452.27	1887	No. 1	$ 37,500— 2½%	($ .25 per share) Dividend
1883	12,900.42	1888	Nos. 2 to 8	112,500— 7½%	(.75 per share) Dividend
1884	149,741.39	1889	Nos. 9 to 14	97,500— 6½%	(.65 per share) Dividend
1885	244,444.70				
1886	224,157.58	1891	Nos. 15 to 17	45,000— 3%	(.30 per share) Dividend
1887	613,446.05	1892	Nos. 18 to 22	187,500—12½%	(1.25 per share) Dividend
1888	767,632.15	1893	Nos. 23 to 26	150,000—10%	(1.00 per share) Dividend
1889	590,189.55				
1890	113.28	1896	Nos. 27 to 30	60,000— 4%	(.40 per share) Dividend
1891	369,587.19	1897	Nos. 31 to 42	180,000—12%	(1.20 per share) Dividend
1892	614,498.67	1898	Nos. 43 to 50	120,000— 8%	(.80 per share) Dividend
1893	492,534.87	1899	Nos. 51 to 63	195,000—13%	(1.30 per share) Dividend
1894	392,485.92	1900	Nos. 64 to 78	255,000—17%	(1.70 per share) Dividend
1895	158,164.42	1901	Nos. 79 to 95	255,000—17%	(1.70 per share) Dividend
1896	449,525.88	1902	Nos. 96 to 100	75,000— 5%	(.50 per share) Dividend
1897	568,872.06	1903	No. 101	15,000— 1%	(.10 per share) Dividend
1898	611,467.76	1904	Nos. 102 to 110	135,000— 9%	(.90 per share) Dividend
1899	798,994.77	1905	Nos. 111 to 124	195,000—13%	(1.30 per share) Dividend
1900	827,443.12	1906	Nos. 125 to 142	285,000—19%	(1.90 per share) Dividend
1901	780,760.18	1907	Nos. 143 to 155	195,000—13%	(1.30 per share) Dividend
1902	490,273.34	1908	Nos. 156 to 167	180,000—12%	(1.20 per share) Dividend
1903	436,818.29	1909	Nos. 168 to 175	120,000— 8%	(.80 per share) Dividend
1904	721,374.87	1910	Nos. 176 to 181	120,000— 8%	(.80 per share) Dividend
1905	993,065.39	1911	No. 182	45,000— 3%	(.30 per share) Dividend
1906	1,112,171.69	1912	Nos. 183 to 184	70,000— 3½%	(.35 per share) Dividend
1907	791,347.62		189		
1908	788,910.23	1913	Nos. 185 to 185	220,000—11%	(1.10 per share) Dividend
1909—10 months	636,500.00	1914	Nos. 190 to 194	260,000—13%	(1.30 per share) Dividend
1910	890,700.00	1915	Nos. 195 to 199	280,000—14%	(1.40 per share) Dividend
1911	887,169.59	1916	Nos. 200 to 207	400,000—20%	(2.00 per share) Dividend
1912	944,212.67				
1912-13—12 months	1,051,273.28	1917	Nos. 208 to 212	260,000—13%	(1.30 per share) Dividend
1913—last 3 months	328,100.05	1917	Nos. 1 and 2	140,000— 7%	(.70 per share) Amortization
1914	1,239,877.13	1918	Nos. 213 to 216	200,000—10%	(1.00 per share) Dividend
1915	1,191,760.70	1918	Nos. 3 to 6	200,000—10%	(1.00 per share) Amortization
1916	1,553,114.86	1919	Nos. 217 to 220	200,000—10%	(1.00 per share) Dividend
1917	1,674,193.80	1919	Nos. 7 to 10	200,000—10%	(1.00 per share) Amortization
1918	1,803,751.79	1920	Nos. 221 to 226	320,000—16%	(1.60 per share) Dividend
1919	2,115,158.25	1920	No. 11	40,000— 2%	(.20 per share) Amortization
1920	1,568,612.32				
1921	466,956.02	1922	Nos. 227 to 230	200,000—10%	(1.00 per share) Dividend
1922	1,066,732.57	1923	Nos. 231 to 235	250,000—12½%	(1.25 per share) Dividend
1923	1,421,911.15	1924	Nos. 236 to 241	350,000—17½%	(1.75 per share) Dividend
1924	1,584,610.32	1925	Nos. 242 to 249	400,000—20%	(2.00 per share) Dividend
1925	1,763,023.16	1926	Nos. 250 to 257	400,000—20%	(2.00 per share) Dividend
1926	1,601,429.35				
1927	1,341,300.06	1927	Nos. 258 to 265	400,000—20%	(2.00 per share) Dividend
1928	1,500,233.98	1928	Nos. 266 to 274	450,000—22½%	(2.25 per share) Dividend
1929	1,477,710.79	1929	Nos. 275 to 283	500,000—25%	(2.50 per share) Dividend
1930	1,315,821.38	1930	Nos. 284 to 290	371,677—18¾%	(1.87½ per share) Dividend
1931	1,403,104.20	1931	Nos. 291 to 297	364,159—18¾%	(1.87½ per share) Dividend
1932	1,355,117.43	1932	Nos. 298 to 303	280,859—15%	(1.50 per share) Dividend
	$46,185,748.51			$9,816,695	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 284, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00
Dividends 285 to 303, inclusive, were paid on outstanding capital stock.

Comparative Statement of Net Assets

FOR THE YEARS ENDED DECEMBER 31st AS BELOW

CURRENT ASSETS—	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
Cash and Cash Items	$308,423	$474,620	$ 146,298	$ 184,750	$ 94,999	$ 116,838	$ 382,693	$ 339,942	$ 41,578	$ 119,820	$ 150,019
Marketable Securities	564,611	546,239	1,394,411	1,818,692	1,932,105	1,970,034	1,739,977	1,827,816	2,138,449	2,060,260	2,053,330
Bullion in Transit	142,270	307,157	261,416	263,334	242,857	222,503	316,758	230,726	213,368	231,552	186,653
Ore in Stopes and Mill Bin	91,467	88,245	107,375	77,385	77,665	88,477	90,160	118,908	143,843	89,779	103,562
Materials and Supplies	191,772	210,782	235,033	247,461	286,312	242,925	240,828	229,242	227,065	245,795	234,766
Total Current Assets	$1,298,543	$1,627,043	$2,144,533	$2,591,622	$2,633,938	$2,640,777	$2,770,416	$2,746,634	$2,764,303	$2,747,206	$2,728,330
Deduct: Current Liabilities	218,305	205,153	262,560	278,038	123,768	117,830	133,891	98,604	84,882	114,840	64,385
Net Current Assets	$1,080,238	$1,421,890	$1,881,973	$2,313,584	$2,510,170	$2,522,947	$2,636,525	$2,648,030	$2,679,421	$2,632,366	$2,663,945
OTHER ASSETS—											
Accounts Receivable, Investments, Deferred Charges, etc.	269,179	312,547	222,260	139,276	150,155	253,536	267,620	287,274	266,380	260,729	225,404
PERMANENT—											
‡Mines, Real Estate, Concessions, Buildings, Machinery, etc. (less Allowances for Depreciation)	2,080,317	2,030,539	2,032,953	2,030,457	2,012,815	1,973,712	1,947,457	1,918,040	1,933,697	1,919,621	1,928,399
*Total Net Assets	$3,429,734	$3,764,976	$4,137,186	$4,483,317	$4,673,140	$4,750,195	$4,851,602	$4,853,344	$4,879,498	$4,812,716	$4,817,748
Increase of Net Current Assets over Preceding Year		$341,652	$460,083	$431,611	$196,586	$12,777	$113,578	$11,505	$31,391	$47,055†	31,579
Increase of Net Current Assets over December 31, 1922		$341,652	$801,735	$1,233,346	$1,429,932	$1,442,709	$1,556,287	$1,567,792	$1,599,183	$1,552,128	$1,583,707

* Represented by Capital Stock, Surplus, Reserves for Depletion, Contingencies, etc., with no adjustment for increased valuation of mines, etc.

† Decrease.

‡ Not adjusted for increased valuation of mines.

ANNUAL REPORT
OF THE GENERAL MANAGER

January 1, 1933.

To the President,

New York & Honduras Rosario Mining Company,
21 West Street,
New York, N. Y.

Dear Sir:

The following is a summary of this Company's mining operations during the fiscal and calendar year 1932.

Production

	1932	1931
Dry tons treated	142,700	131,900
Average per ton—Troy ozs. silver mined	28.359	30.375
Average per ton—Troy ozs. gold mined	.1193	.1269
Total Troy ozs. silver mined	4,046,858	4,006,397
Total Troy ozs. gold mined	17,024	16,738
Total Troy ozs. silver produced	3,706,519	3,695,681
Total Troy ozs. gold produced	16,083	15,935
Average per ton—Troy ozs. silver produced	25,974	28.018
Average per ton—Troy ozs. gold produced	.1127	.1208
Ratio of gold to silver	1:230	1:232
Bars Doré Bullion	2,260	2,157
Bullion fineness of silver	967.12	974.49
Bullion fineness of gold	4.197	4.202

No custom ore or bullion in 1932.

The bullion production in 1932 is the largest in the 52 years' operating history of the Company, exceeding that of 1931 by 10,838 Troy ounces silver and 148 Troy ounces gold.

The ratio of gold to silver is very nearly the same as in 1931. In the latter part of 1932 the ratio of gold tended to improve, which, if continued in 1933, should give a relatively larger gold production in proportion to the silver.

Honduras Operating Costs in U. S. Currency

	Tons 1932
Broken Ore in Stopes Reserve 1/1/32	22,100
Ore Mined—1932	145,041
Total Ore for 1932	167,141
Ore delivered to Mill in 1932	142,354
Broken Ore in Stopes Reserve 1/1/33	24,787
Broken Ore in Stopes Reserve as per Measurements Adjustment 1/1/33	646
Broken Ore in Stopes Reserve Actual 1/1/33	25,433
Total Troy Ounces Silver recovered	3,697,017
Total Troy Ounces Gold recovered	16,054
Feet Exploration and Development Driven	23.022.5
Diamond Drilling—Feet Driven	1,978

	Tons 1931
Broken Ore in Stopes Reserve 1/1/31	36,163
Ore Mined—1931	116,884
Total Ore for 1931	153,047
Ore delivered to Mill in 1931	131,791
Broken Ore in Stopes Reserve 1/1/32	21,256
Broken Ore in Stopes Reserve as per measurements adjustment 1/1/32	844
Broken Ore in Stopes Reserve Actual 1/1/32	22,100
Total Troy Ounces Silver recovered	3,689,790
Total Troy Ounces Gold recovered	15,835
Feet Exploration and Development Driven	20,364.5
Diamond Drilling—Feet Driven	.....

YEAR—1932			Total Costs	YEAR—1931		Total Costs	Cost Per Ton 1932	Cost Per Ton 1931	Cost Per Ounce of Silver 1932	Cost Per Ounce of Silver 1931
MINING										
Labor		$277,392.08		$213,166.72						
Supplies		227,037.84		154,802.20						
Power		5,121.98		5,068.28						
Depreciation, etc.		(Credit) 2,613.42		23,740.73						
Ore Mined and Milled										
1st of Year	$ 89,779.10									
Last of Year	103,562.46	Cr.13,783.36	$493,155.12	54,063.79		$450,841.72	$3.46	$3.42	$ .1334	$ .1222
MILLING										
Labor		58,897.35		$ 50,749.74						
Supplies		200,621.40		183,468.48						
Power		8,887.60		5,677.14						
Depreciation, etc.		22,761.52	291,167.87	55,127.31		295,022.67	2.05	2.23	.0787	.0799
ADMINISTRATION										
Labor and Supplies		$159,384.50		$132,108.12						
Depreciation, etc.		11,731.73	171,116.23	23,681.87		155,789.99	1.20	1.18	.0463	.0422
			$955,439.22			$901,654.38	$6.71	$6.83	$ .2584	$ .2443
Mine Yearly Concession Expense			15,000.00			15,000.00	.11	.11	.0041	.0041
			$970,439.22			$916,654.38	$6.82	$6.94	$ .2625	$ .2484
Credit for Gold			331,841.97			327,321.77	2.33	2.48	.0898	.0887
			$638,597.25			589,332.61	4.49	4.46	.1727	.1597

Honduras Operating Costs

The total Honduras Operating Costs, compared with those for 1931, are $53,785.00 higher. This increase is due principally to two causes; first, the mining of 28,157 more tons of ore, and secondly, an increase in exploration and development footage of 2,658 feet.

The cost reductions in local supplies, made in 1930 and 1931, were sustained throughout 1932. Land freight between San Lorenzo and the Mines, which had to be increased in 1931 due to bad crop conditions, was reduced during the year to the 1930 rates. With the probability of good crops and continuance of peace no increase in the cost of these local items is anticipated in 1933.

A new, cheaper and more abundant source of mine timber supply became available when the Upper 150 West Cross-cut penetrated the western slope of the mountains in the early part of 1932. When supplying the entire mine this new timber tract should become an appreciable factor in decreasing the total mine timber costs.

THE MINE

Ore Reserves

The Active Ore Reserves as of December 31, 1932, summarized below, are based, as in the past two years, on silver at 30 cents per ounce Troy.

Summary—Active Reserves

	Tons of Ore Plus Waste	Avg. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
Calculated Ore, at 13 and 14 cu. ft.	255,000	30.59	.1394	7,816,000	35,615
Broken Ore in Stopes, at 21 cu. ft.	25,433	29.67	.1261	754,597	3,207
TOTAL ACTIVE RESERVES as of January 1, 1933	280,933	30.51	.1382	8,570,597	38,822

These reserves are greater by 68,833 tons, equal to 2,548,897 gross ounces silver and 11,092 ounces gross gold, than the reserves gross ounces silver and 11,092 gross ounces gold, than the reserves reported as of December 31, 1931, although during the past year there were milled 142,700 tons of ore, yielding 4,046,857 gross ounces silver and 17,024 gross ounces gold.

Summary—Inactive Ore Reserves

	Tons of Ore Plus Waste	Avg. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
Calculated Ore, at 13 cu. ft.	75,800	16.95	.0555	1,284,500	4,204
Estimated Ore, at 13 cu. ft.	31,300	12.64	.0607	395,700	1,900
TOTAL INACTIVE RESERVES as of January 1, 1933	107,100	15.69	.0570	1,680,200	6,104

The Inactive Ore Reserves, shown in detail in Annex "B," are based on silver at 50 cents per Troy ounce. These reserves are the same as for 1932, excepting that about 2,000 tons were mined in 1932 from the South San Miguel Group thereof.

In addition to the reserves just described, there are, subject to the results of further development, about 300,000 tons more ore.

Ore Production

	1932	1931	1930	1929
By Stoping	123,018	118,979	69,391	73,305 tons
From Dev. Excavations	19,336	12,812	39,347	40,997 tons
Total	142,354	131,791	108,738	114,302 tons
Development feet driven	23,022.5	20,364.5	21,518	25,325

The 1932 ore production monthly, from each vein, is shown in Annex "D."

Labor

The labor employed underground on the day and the night shifts, as well as at the several Mine Portal shops and warehouses, was distributed as follows:

	1932	1931
Day shifts	305	306
Average number of men per day shift	471	392
Night shifts	305	197
Average number of men per night shift	58	45
Total man shifts	161,345	128,817

Compared with 1931, 25%, or 32,528 man shifts more were worked. This increase is due mostly to 28,157 tons more being mined and 2,658 feet more of exploration and development driven.

Exploration, Development and Mining

The total footage driven in 1932, compared with 1931, is shown in the following summary of "Annex C":

Year	Drifts	Crosscuts	Raises	Winzes	Misc.	Total
1932	11,985.0	6,757.5	4,280.0	.....	.....	23,022.5
1931	11,323.5	7,034.5	2,006.5	.....	.....	20,364.5

The 1932 total footage exceeds that of 1931 by 2,658 feet.

The outstanding tunneling work in 1932 was the driving, under adverse conditions, of the Lower 650 Jucuara Group Cross-cut a distance of 2,410 feet. This cross-cut starts at the West vein, is now 2,440 feet long and recently intersected Jucuara Vein No. 3. A further drive of 300 feet will be required to get below Veins No. 2 and 1. Three raises for handling ore, waste and supplies will be started early in 1933. Each raise will be about 400 feet high and connect with the Lower 300 Level Jucuara Section. This will permit mining the Jucuara Group at a greater rate and also make the ore more cheaply available to the Mill.

Diamond Drilling

During the last six months of 1932 four holes were bored, totaling 1,978 feet.

The principal object of our present diamond drill work is to learn, and at lower cost, the approximate width and value of stringers branching off the main ore bearing veins, to see whether improvement occurs in these at distances of about 100 feet to 300 feet from their junction with the main veins.

In 1933 diamond drill work is planned in faulted ground where ore bearing veins have been displaced, but where as yet no exploration work has been done, to see whether they continue on the other side of the faulting.

Underground Connections

This work consists of drifts, cross-cuts and raises driven around caved workings, to shorten haulage-ways, ventilation, drainage, etc. As in 1931, it was very small, only about 200 feet being driven. No greater footage for these purposes is expected in 1933.

Veins Worked in 1932

Six veins produced all the ore mined in 1932, compared with 19 in 1928 and 17 in 1929.

The following is a brief description of work done in each during 1932:

Salvador Group

Salvador Vein

The ore production from the Salvador Vein in 1932 was again a record, 55,755 tons being mined as compared with 38,911 tons in 1931. Exploration and development footage driven in 1932 was 5,946 feet compared with but 2,692 feet in 1931, or more than double.

Both increases are due largely to successful results obtained by exploration and development in the western section of the Salvador Vein, a general outline of which was given in the 1931 Annual Report. The ore zone opened up here by the 1932 work extends over a vertical height on the vein of about 450 feet, and laterally about 600 feet. Development tunnels and raises were driven westward on the Upper 150, Lower 200, Lower 300 and Lower 400 levels, and the work at the Upper 150, the present highest level on this ore body, gives good indications. The deepest level on this ore body at the present time is the Lower 300 level, being 375 feet below the Upper 150. The Lower 400 level drift, however, which is 135 feet still deeper below the Lower 300 and also driven on the vein, carries at this depth no commercial values and indicates that the profitable ore bottom is somewhere between the Lower 300 and

Lower 400 levels. The Lower 200 and Lower 300 levels in their westerly development have entered faulted and fractured ground which so far seems to have terminated the continuation of the ore body just described. The Salvador Vein itself, however, still continues beyond this fault, but is split into several narrow stringers of no definite strike or dip though occasionally carrying bunches of good grade ore. The possibility for continuation of the Salvador Vein west of the faulted section is still considered a fair one, so development in that direction will continue to receive attention in 1933.

The southeastern section of this vein underwent a moderate amount of development in 1932 at the Lower 200 and Lower 400 levels to make available for 1933 production the lower reaches of ore bodies previously mined out at the levels above.

A substantial ore tonnage is still expected from this vein in 1933, and may average better in grade than that obtained in 1932.

Salvador Group

Fortuna Vein

The Fortuna Vein belongs to the Salvador Group located in the Esperanza section of the Mine and was a fairly large ore producer before the 1930 drop in silver made it necessary to suspend all work therein. No work has been done in this vein since as the ore still in reserve is too low in grade to pay even the mining costs.

Independencia Group

Independencia Vein

The ore output from this vein in 1932 was 19,245 tons, compared with 34,694 tons in the year previous.

The 45% decrease in ore tonnage is due largely to suspension of mining at the Lower 300 level in the western section of the vein when this, due to faulting, became so loose and disseminated as to make the ore obtained too low in grade. It is believed that this difficulty is but a temporary one, and that when the raises now being driven from the Lower 300 level reach the junction of the vein and the fault which disturbed it, the vein above this will again continue normally and in better grade.

The bulk of the 1932 ore production came from the Lower 200 level southeastern section and near the junction with the Salvador Vein. The Independencia Vein near this junction, while still in good width, contains considerable waste dilution, making it too low grade at present silver prices. These workings, however, are being kept open in 1933 in the event better silver prices make it possible to resume some production.

In 1932 a 600 ft. cross-cut was started at the Upper 150 level off the San Blas Vein, to explore the Independencia in the vicinity of the Salvador at the junction just mentioned, but at an elevation of about 235 feet higher than at the Lower 200 level. Past mining

in both veins shows that very good ore exists in each at this higher ore horizon. The purpose, therefore, is to see whether this also is the case near the junction at this elevation.

Efforts were continued in 1932 to locate the Independencia Vein west of the large fault which cuts it off at all the upper levels. 750 feet of drifting and cross-cutting at the Lower 200 level, and in addition 690 feet of diamond drill work in three holes at the Upper 150 level, were done with this object in view. With the exception of indications that further exploration westward on the other side of the fault is still warranted, no definite results were obtained.

At the Lower 300 level eastward and the Lower 400 level westward development of the Independencia Vein generally continued in 1932 and disclosed downward extensions of some of the large ore bodies mined in previous years in the higher and richer sections. These ore bodies, at this depth, show the usual diminution in per ton value, but there are certain sections which, even at present silver prices, can be mined at a small profit. The Lower 400 section, still under development, holds out the best possibilities in this regard.

No work is planned in 1933 at the Lower 300 level eastward as any ore found at this depth would be too low in grade to yield profit at this time. Later, however, if silver improves, the east heading should be continued into the Salvador Junction where some betterment in per ton ore values may occur.

Santa Fe Group

Santa Fe

San Benito

The ore production in 1932 from this group was 53,911 tons or 3,402 tons more than in 1931. As in 1931, the ore was mostly below average grade due to the mining being largely along the extremes of the ore bodies where the vein is irregular in width and in value.

Development in 1932 was only 2,394 feet, or less than half that in 1931. Most of the footage driven was westward at the Lower 250 level on the faulted section of the Santa Fe and in the same direction on the San Benito at the Lower 200 level. No important ore bodies were found in either vein in their western extent though this work disclosed several places, particularly in the Santa Fe, where gold values are appreciably higher than the average. To determine the downward extent of these gold pockets a cross-cut will be started at the Lower 400 level, 185 feet deeper, to see if the vein is similarly ore bearing at this lower elevation also. Development westward at the two levels noted is to be continued in 1933 as possibilities for ore there are still considered fair. In the eastern section of this group no development is planned for 1933 unless diamond drill exploration soon to be started there indicates its advisability.

Jucuara Group

Veins Nos. 1, 2 and 3

Exploration and development work was continuous in 1932 in the three principal veins intersected by the Lower 300 Jucuara exploration cross-cut in 1930 and 1931. The total footage driven in 1932 was 9,619 feet, 4,059 feet of which was in cross-cuts for purposes of exploration, haulage facilities and ventilation.

Development work was 5,559.5 feet. 3,455 feet were driven in Vein No. 1, the remainder, or 2,104.5 feet, being distributed in Veins Nos. 2 and 3. The decrease in footage in Veins Nos. 2 and 3 is not due to their lack of future ore possibilities, but principally to lack of sufficient ventilation, haulage capacity and compressed air. A raise is now being driven from the Lower 300 level which will soon connect with the bottom of the shaft sunk from the Upper 150 level on Vein No. 2. This should solve the difficulties mentioned and permit more extensive exploration of these two veins in 1933.

The ore limits of the three Jucuara veins, either in depth or in length, have as yet not been fully determined; but this will be the principal objective of the 1933 exploration and development program. The work in the Jucuara Group is being so projected that the cross-cuts, drifts and raises, besides accomplishing their main purpose of exploration and development will, wherever practicable, be so located that their subsequent use as entries into the Jucuara mining section will permit not only a larger ore output but also cheaper mining and handling of ore and waste to the Lower 650 Electrical Mill Haulage Level.

Exploration and Other Cross-Cuts

Upper 150 *Porvenir Adit Cross-Cut*

The general purpose of this cross-cut is exploration of southern territory into which the South San Miguel and Culebra Veins or their stringers may penetrate and also at the same time to shorten the distance from the surface into the Esperanza section of the Mine by about 2,250 feet. The distance driven in 1932 was 436.5 feet and only 160 feet are lacking to make connection with the Esperanza Mine. This connection will be of immediate benefit by improving ventilation. It will also release about 2,500 feet each of 4″ and 6″ compressed air pipe, permit resumption of development in the Porvenir Vein, and reduce the distance labor has to walk to and from their work by about a mile. When the connection referred to is made, 3,500 feet of 10″ diameter compressed air pipe is to be installed to supply the Esperanza Section with more compressed air and at better drilling pressure than is at present possible.

Upper 150 *West Cross-Cut*

This cross-cut, after being driven 167 feet, reached the northwestern slope of the mountain range at the "Quebrada Honda"

gulch in January, 1932. The last 2,000 feet driven were in badly fractured ground, devoid of veins. There are, however, in the "Quebrada Honda" section itself, several surface prospects, which now, due to their proximity to the cross-cut, became cheaply accessible for prospecting work. Some of this may be started in 1933.

This cross-cut has also made available an extensive and cheaper mine timber supply which should result in appreciably lowering mine timber costs. Also available now is a water supply which, when diverted through the Mine, will serve as additional power through the three hydro-electric plants on the eastern slope.

Lower 400 Esperanza Cross-Cut

The purpose of this cross-cut is exploration of the southern territory some 20,000 feet ahead, and at average depth of from 800 to 1,200 feet below the surface. Owing to a geologically recent volcanic ash capping over this territory, any veins which may exist do not show their outcrops at the surface. The rock at the depth at which this cross-cut is being driven, however, is similar to that which in the past was so prolific in veins. The principal objective, therefore, is to traverse this rock formation below the capping to see if any veins exist in it at the depth of the cross-cut.

After driving 170 ft. in 1932, it became necessary to suspend work due to bad ventilation. Work in 1932, therefore, was confined entirely to widening 2,800 feet cross-cut already driven, to install a 16½" ventilating pipe, the electrical transmission line, blower, etc. This work should be concluded by July, 1933, when exploration will be resumed at once.

Mine Equipment

General mine equipment at the surface and underground was kept up to normal in 1932. The greater tonnage mined and increase in development footage driven made it necessary in 1932 to purchase additional drifting and stoping machines, both to increase the number in use and to replace wornout machines.

THE MILL

Tonnage Crushed

	1932	1931
Total wet tons received	154,958.63	147,591.98
Average per cent moisture	8.1344	10.705
Total dry tons milled	142,700	131,900
Average tons per day milled (365 days)	391	361
Average tons per day milled, full running time	425	396
Average tons per day milled, per 1850 lb. stamp	21.2	19.8
Number of 1850 lb. stamps	20	20
Total tons treated by present Mill to December 31, 1932	2,195,408	2,052,708

Recovery

	1932	1931
Average ounces silver received per ton	28.359	30.375
Total ounces silver received	4,046,858	4,006,397
Average ounces silver recovered per ton	25.974	28.016
Total ounces silver recovered	3,706,519	3,695,681
Average silver recovered, per cent	91.590	92.233
Average ounces gold received per ton	.1193	.1269
Total ounces gold received	17,024	16,738
Total ounces gold recovered per ton	.1127	.1202
Total ounces gold recovered	16,083	15,935
Average gold recovery, per cent	94.468	94.720

Supplies Used

	1932 Per ton of ore crushed	1931 Per ton of ore crushed	1932 Per oz. fine bullion produced Grade of Ore	1931 Per oz. fine bullion produced Grade of Ore
	142,700 Tonnage	131,900	Ag. 28.359 Au. .1193	Ag. 30.375 Au. .1269
Cyanide (100% KCN)	4.947380 lbs.	5.070497 lbs.	.189650	.180215
Steel Balls	.014054 lbs.	.027983 lbs.	.000537	.000995
Zinc Dust	.825180 lbs.	.961713 lbs.	.031632	.034181
Muriatic Acid	.064751 lbs.	.037718 lbs.	.002482	.001341
Lime	16.520560 lbs.	16.645208 lbs.	.633289	.591602
Pebbles, Foreign	.927120 lbs.	None	.035540	None
Borax Glass	.032936 lbs.	.037908 lbs.	.001263	.001347
Soda	.011563 lbs.	.013116 lbs.	.000443	.000466
Fuel Oil	.049741 gals.	.043306 gals.	.001907	.001539
Tube Mill Rock	63.597757 lbs.	72.295677 lbs.	2.437918	2.569523
Sulphur	2.371479 lbs.	2.675695 lbs.	.090907	.094459

Ore Analysis

	1932	1931	1930	1929	1928	1927
Silica (SiO_2)	71.65%	70.72%	71.36%	73.98%	74.15%	73.63%
Alumina (Al_2O_3)	11.17%	10.82%	9.76%	10.00%	13.57%	11.17%
Iron, metallic	3.32%	3.91%	4.03%	3.84%	3.45%	2.96%
Manganese	0.51%	0.66%	0.64%	0.48%	0.83%	0.74%
Zinc	2.06%	1.26%	1.64%	0.49%	0.50%	0.46%
Antimony	0.02%	0.01%	0.009%	0.016%	Trace	0.06%
Arsenic	0.013%	0.016%	0.012%	0.021%	0.04%	0.03%
Lead	0.61%	0.35%	0.37%	0.27%	0.29%	0.22%
Sulphur	2.02%	1.81%	1.83%	1.60%	1.25%	1.12%
Copper	0.05%	0.555%	...	...	...	...
Lime (CaO)	1.11%	0.75%	0.90%	0.68%	0.57%	0.57%
Magnesia (MgO)	0.64%	1.03%	1.72%	1.84%	0.49%	0.77%

Treatment Period Detail

	1932				1931			
	Hrs.	Min.	Ag. %	Au. %	Hrs.	Min.	Ag. %	Au. %
Extraction by Crushing Solution	9	00	39.38	80.72	9	00	35.25	79.04
Extraction by Agitation	81	31	52.60	14.08	84	52	57.63	15.60
Extraction in Slime Presses	1	5	.32	.59	1	5	.15	.79
	91	36	92.30	95.39	94	57	93.03	95.43
Less: Dissolved Value Loss			.71	.92			.80	.71
Recovery			91.59	94.47			92.23	94.72
Percent sand not passing 150 mesh			20.681				23.993	

Tonnage Milled

The tonnage milled in 1932 is the largest on record, exceeding that of 1931 by 10,800 tons and the previous high record in 1920 by 2,600 tons.

The tonnage increase in 1932, as compared with the year previous, is due largely to additional power available from the Aguacatal Power Plant and consequently longer and more continuous operation of all the grinding units.

Recovery

The silver recovery in 1932 is 0.643 lower than in 1931. There was no change in the character of the ore treated in 1932, so that the drop in silver recovery is due to three causes: a lower grade of silver (about two ounces), a greater tonnage treated, and in addition, a shorter treatment period.

Cyanide Recovery Process

It was not necessary to make general repairs to this equipment in 1932, as anticipated in the 1931 report, as no noticeable drop in its efficiency has as yet occurred. With few minor repairs entailing but little cost and delay it is quite probable that this process will continue to work satisfactorily in 1933.

General Repairs

In accordance with 1931 plans orders were placed for steel tanks to replace those which after 21 years' continuous service are now beyond repair. Their installation started in December, 1932 and will be continued at an increasing rate in 1933.

POWER

Rainfall

Total Rain, Inches	53.25	82.87
Number of Rainy Days	191	204
Greatest Monthly Rainfall	9.38 (June)	13.64 (Sept.)
Lowest Monthly Rainfall	.75 (Feb.)	1.52 (Nov.)
Greatest Single Rainfall	1.97 (Oct.)	3.08 (Sept.)

POWER DISTRIBUTION

	1932 Kilowatt Hours	1932 K.W. Hours Per Ton	1931 Kilowatt Hours	1931 K.W. Hours Per Ton
Mine Power	2,564,440	17.971	3,069,060	23,268
Electric Haulage	175,990	1.233	175,000	1.327
Blacksmithing	36,300	.254	31,000	.235
Mine Lights	18,000	.126	13,000	.099
Hoisting	26,500	.186	35,000	.265
Mill Power	4,784,210	33.526	3,613,400	27.395
Mill Lights	28,000	.196	25,600	.194
Surface Lights	338,700	2.374	133,000	1.008
Surface Power	126,730	.888	135,100	1.024
Machine Shop	97,500	.683	28,000	.212
Laboratory	22,760	.159	12,800	.097
Totals	8,219,130	57.596	7,270,960	55.124

Power Production by:

San Juancito Plant	52.38%	56.92%
Guadalupe Plant	36.81%	40.31%
Aguacatal Plant	10.81%	2.77%
	100.00%	100.00%

COST OF POWER PRODUCTION

	1932 Amount U. S. Cy.	1932 Per Ton	1932 K.W. Hr.	1931 Amount U. S. Cy.	1931 Per Ton	1931 K.W. Hr.
Labor	$ 9,526.85	.06676	.0011591	$ 9,128.04	.06920	.0012554
Supplies	6,637.36	.04651	.0008076	2,092.93	.01587	.0002878
Total	$16,164.21	.11327	.0019667	$11,220.97	.08507	.0015432

Based on Horsepower Generated:

	1932	1931
Horsepower Hours	11,017,599	9,743,086
Cost per Horsepower Hour	$ 0.001467	$ 0.001152
Cost per Horsepower Year	$12.8861	$10.0915
Cost per Horsepower Year, increase	$ 2.7946	

While the total rainfall in 1932 was 35% less than in 1931 the total K.W.H. output was 13% greater. The increase in electrical output is due largely to the addition to the generating circuit of the 400 K.V.A. Aguacatal Power Plant, the construction of which was concluded in 1931.

Substantial repairs and replacements were made in 1932 to the several wooden flumes, about 32,000 feet in length, which supply water to the three hydro-electric plants. One of the concrete dams was also entirely reconstructed and three others repaired. These items as well as damage caused by the record heavy rains in 1931 increased the total power cost by $4,943.24 as compared with the year previous.

Owing to the equipment mentioned above being now in better shape its upkeep cost in 1933 should be less than was the case in 1932.

The Annual Report for 1931 is referred to for general details covering the three hydro-electric power plants, flume lines, etc.

OTHER DEPARTMENTS

Mechanical Department

Investigation shows that at least 14 of the steel tanks in the Mill are beyond repair and will have to be replaced as quickly as possible. This replacement work was started in December and will be continued actively in 1933.

Foundry work, which during 1932 was suspended, is to be resumed in 1933 as sufficient scrap has again accumulated.

Medical Department

	1932	1931
Cost of maintenance	$ 7,117.31	$ 7,172.80
Total consultations, examinations and treatments	12,098	10,414

Since installation of the X-Ray machine in 1930 no new equipment has been purchased. Both the Hospital and the Native Ward continued to be kept fully equipped and in best repair.

A smallpox epidemic occurred last Spring and required vaccination of over 2,000 persons. Smallpox is always prevalent in this district, but last Spring's efforts, and continuation of vigilance, have eradicated it to a considerable extent.

Assay Office and Laboratory

	1932	1931
Total number assays run	28,764	23,124
Average number of assays per day	79	63
Total cost	$ 6,533.80	$ 7,412.12
Cost per assay	.23	.32
Decrease	878.32	

With 4,640 more assays run and $878.32 less expense than in 1931, the cost per assay in 1932 was reduced from 32 cents to 23 cents, the lowest on record.

Schools

Average Daily Attendance During Year:

	1932	1931
Boys' School	111	94
Girls' School	131	132
Rosario Mixed School (Native)	58	56
Rosario Foreign School	5	5
Total expense, Native and Foreign Schools	$12,457.87	$12,139.58
Increase	318.29	

The local primary grade schools are maintained by the Company under an agreement with the Municipality of Tegucigalpa in whose jurisdiction the Rosario property lies.

Police and Garrison

	1932	1931
Total maintenance expense	$15,265.04	$16,027.84
Decrease	726.80	

The decrease is due largely to reductions in the garrison and police during November and December.

Hotel

	1932	1931
Total number of meals served	29,306	28,378
Total cost	$16,865.78	$16,943.78
Cost per meal	0.579	0.597

The decrease in cost per meal is assigned mostly to more locally raised vegetables being used.

Roads

	1932	1931
Total maintenance	$5,648.45	$4,214.88
Increase	1,433.57	

The higher cost for road maintenance in 1932 is due largely to the heavy rains in the latter part of 1931, which did more than usual damage to the road between the Mines and the Capital.

Agencies

	1932	1931
Total expense	$3,688.49	$3,764.78
Decrease	76.29	

The total maintenance expense of Agencies at Amapala, San Lorenzo, Tegucigalpa and Puerto Cortés was about the same in 1932 as the average for the last 11 years.

Surface Department

Reconstruction of a large masonry retaining wall which, due to very heavy rains, had been completely destroyed by a landslide endangering the new General Office and other buildings located just above the slide, progressed sufficiently up to the end of the year to eliminate the danger referred to. This represents an unforeseen and additional cost to 1932 operations, which so far has amounted to $2,500.00.

EXPANSION

In 1932 examinations of several mining properties were made in the Republic of Salvador and two others in Honduras, near the Salvador border.

A small amount of work was done on two gold prospects belonging to the Company, namely, "California," Department of Olancho, and "Moloncosa," Department of Choluteca. A cross-cut tunnel is being driven on each to see if surface vein showings improve in moderate depth. The same is also the case on the "Conchagua," Department of Paraiso prospect, which is held under short provisional option.

Expenditures in 1932 were $8,873.00 and include taxes, examinations and all prospect work. Owing to prevailing low silver prices preference was given to gold ore possibilities only.

CONCLUSION

The exploration and development program of 1932 gave very satisfactory results, as indicated by the Active Ore Reserves existing on January 1, 1933, described in detail under "Ore Reserves" and in "Annex A" and as compared with those existing on January 1, 1932. There is every reason to believe that the 1933 silver and gold production should be at least equal to that of the year just closed.

Full credit is due to the operating staff for the cooperation received in the past year and appreciation is expressed to the Officers of the Company and the Board of Directors for their continued full confidence and support with which the management was favored in the year past.

Respectfully submitted,

A. R. GORDON,
General Manager.

Annex "A"

Active Ore Reserves

CALCULATED RESERVES (13 and 14 cu. ft. per ton)	Av. width, feet			Tons of ore plus waste	Av. Troy ounces per ton		Total Troy ounces	
	Vein	Waste	Stoping		Ag.	Au.	Ag.	Au.
Independencia Group								
Independencia	2.05	2.42	4.47	30,500	30.	.09	915,000	2,745
Jucuara Group								
Vein No. 1	2.45	1.55	4.00	69,500	31.	.12	2,154,500	8,340
Vein No. 2	3.26	1.62	4.88	40,000	34.	.18	1,360,000	7,200
Vein No. 3	1.82	2.68	4.50	4.500	19.	.20	85,500	900
Salvador Group								
Salvador	2.41	2.23	4.64	71,000	31.	.13	2,201,000	9,230
Santa Fe Group								
Santa Fe	2.73	2.03	4.76	30.000	28.	.18	840,000	5,400
San Benito	1.37	2.60	3.97	10,000	26.	.18	260,000	1,800
				255,500	30.59	.1394	7,816,000	35,615

BROKEN ORE IN STOPES
(21 cu. ft. per ton)

Veins	
Independencia	1,435
Salvador	13,799
Santa Fe	5,368
San Benito	2,413
South San Miguel	1,995
Mill Bin	423
	25,433

Summary—Active Reserves

Calculated Ore at 13 and 14 cu. ft.	255,500	30.59	.1394	7,816,000	35,615
Broken Ore in Stopes, at 21 cu. ft.	25,433	29.67	.1261	754,597	3,207
TOTAL ACTIVE RESERVES AS OF JANUARY 1, 1933	280,933	30.51	.1382	8,570,597	38,822

Annex "B"

Inactive Ore Reserves

CALCULATED ORE RESERVES (13 cu. ft. per ton)	Av. width	Per cent	Tons of ore plus	Ounces per ton		Total ounces	
Veins	ft.	waste	waste	Ag.	Au.	Ag.	Au.
Carmen	1.8	50	10,000	16.	.030	160,000	300
Fortuna Group	1.3	50	11,900	16.	.040	190,400	476
San Luis	1.8	40	4,000	22.	.060	88,000	240
Culebra	1.7	50	6,600	16.	.050	105,600	330
North San Miguel	1.6	35	4,800	15.	.060	72,000	288
San Joaquin	1.0	60	9,500	15.	.120	142,500	1,140
Santa Gertrudis	1.0	70	5,000	22.	.030	110,000	150
South San Miguel Group	1.5	40	16,000	17.	.060	272,000	960
South West	1.5	40	8,000	18.	.040	144,000	320
TOTALS			75,800	16.95	.0555	1,284,500	4,204

ESTIMATED RESERVES
(13 cu. ft. per ton)

Veins				
Buena Ventura	1,500	12.	.06	18,000	90
Candelaria Group	5,000	12.	.06	60,000	300
Capitana	3,000	10.	.13	30,000	390
Catalina	3,000	14.	.05	42,000	150
Colonia	2,000	14.	.07	28,000	140
Esperanza	1,500	15.	.05	22,500	75
Guadalupe	1,000	12.	.03	12,000	30
North	1,000	14.	.05	14,000	50
Northwest	1,900	14.	.05	26,600	95
Nueva	1,500	12.	.05	18,000	75
Porvenir	2,000	13.	.05	26,000	100
Rosario	5,000	12.	.06	60,000	300
Socorro	900	14.	.05	12,600	45
West	2,000	13.	.03	26,000	60
TOTALS	31,300	12.64	.0607	395,700	1,900

Summary—Inactive Ore Reserves

Calculated Ore, at 13 cu. ft.	75,800	16.95	.0555	1,284,500	4,204
Estimated Ore, at 13 cu. ft.	31,300	12.64	.0607	395,700	1,900
TOTAL INACTIVE RESERVES, AS OF JANUARY 1, 1933	107,100	15.69	.0570	1,680,200	6,104

Annex "C"

Exploration and Development for the Year 1932

Veins and Groups	Drifts	Cross-cuts	Raises	Winzes	Total Feet
Independencia Group					
Independencia	1,623.5	430.0	856.0	.....	2,909.5
San Blas	.....	310.5	.....	.....	310.5
Salvador Group					
Salvador	4,249.5	382.5	1,314.0	.....	5,946.0
Fortuna Extension	2,759.5	3,637.5	695.5	.....	7,092.5
Jacuara Group	1,487.0	422.0	617.5	.....	2,526.5
Santa Fe Group					
Santa Fe	888.5	85.0	610.0	.....	1,583.5
San Benito	572.5	166.0	72.0	.....	810.5
South San Miguel Group	.....	.....	38.0	.....	38.0
Socorro	.....	.....	20.0	.....	20.0
Esperanza Cross-cuts					
Zero	.....	216.5	.....	.....	216.5
L. 200	5.0	289.5	.....	.....	294.5
L. 400	399.5	185.5	.....	.....	585.0
L. 650	.....	27.0	.....	.....	27.0
Other Cross-Cuts					
U. 150 Porvenir Adit	.....	436.5	.....	.....	436.5
U. 150 West	.....	169.0	57.0	.....	226.0
TOTALS	11,985.0	6,757.5	4,280.0	.....	23,022.5

ORE PRODUCTION

Annex "D"

From Stoping Operations:

Veins	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Independencia Group	2,743	2,333	1,784	1,641	3,768	1,514	1,161	710	1,043	873	845	827	19,242
Salvador Group													
Salvador	5,482	5,027	5,258	2,584	1,871	3,751	4,477	3,966	3,900	4,233	4,278	3,849	48,676
Fortuna Extension	....	....	....	....	....	....	11	74	1	....	....	....	86
Santa Fe Group													
Santa Fe	2,707	2,287	2,878	2,333	2,523	3,436	3,837	4,430	4,694	5,009	4,361	4,121	42,616
San Benito	883	1,379	1,735	858	788	520	495	712	728	794	1,102	914	10,908
San Luis	....	....	186	97	100	4	....	....	....	....	....	....	387
South San Miguel Group	....	....	193	49	66	114	109	29	125	144	127	147	1,103
TOTALS	11,815	11,026	12,034	7,562	9,116	9,339	10,090	9,921	10,491	11,053	10,713	9,858	123,018

From Development Excavations:

Independencia Group	80	....	11	....	94	107	8	112	31	....	3	11	457
Jucuara Group	20	52	40	47	80	88	46	134	152	129	131	137	1,056
Salvador Group													
Salvador	780	395	541	344	412	842	847	968	392	214	521	823	7,079
Fortuna Extension	147	380	294	345	589	647	339	978	1,113	949	1,279	1,754	8,814
Santa Fe Group													
Santa Fe	197	154	15	2	111	179	241	229	158	169	98	26	1,579
San Benito	61	136	77	32	31	....	14	....	....	....	....	....	351
TOTALS	1,285	1,117	978	770	1,317	1,863	1,495	2,421	1,846	1,461	2,032	2,751	19,336
GRAND TOTALS	13,100	12,143	13,012	8,332	10,433	11,202	11,585	12,342	12,337	12,514	12,745	12,609	142,354

Annex "E"

TONNAGE MINED

From October 1, 1907 to January 1, 1933

	Total including Stoping, Devel. & Filling Oct. 1, 1907, to Dec. 31, 1931	Total including Stoping, Devel. and Filling Year 1932	Grand total including Stoping, Devel. and Filling Jan. 1, 1933
Buena Ventura	98,490	.....	98,490
Candelaria Group	166,573	.....	166,573
Capitana	54,268	.....	54,268
Carmen	18,365	.....	18,365
Catalina	6,587	.....	6,587
Colonia	56,438	.....	56,438
Concepción	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	106,245	.....	106,245
Esperanza	8,710	.....	8,710
Fortuna Group	75,554	8,900	84,454
Guadalupe	61,177	.....	61,177
Independencia	174,350	19,699	194,049
Jucuara	4,951	1,056	6,007
North	4,647	.....	4,647
Northwest	89,320	.....	89,320
Nueva	28,147	.....	28,147
Porvenir	1,711	.....	1,711
Rosario	150,915	.....	150,915
Salvador Group	337,805	55,755	393,560
San Benito	46,665	11,259	57,924
San Blas	5,052	.....	5,052
San Joaquin	63,030	.....	63,030
San Luis	2,002	387	2,389
San Miguel North	174,801	.....	174,801
San Miguel Group	121,751	1,103	122,854
Santa Fe	91,124	44,195	135,319
Santa Gertrudis	30,789	.....	30,789
Socorro	22,592	.....	22,592
Southwest	20,509	.....	20,509
Termopilas	1,094	.....	1,094
West	97,005	.....	97,005
Veta No. 4	5,001	.....	5,001
Ore from Development	63,599	.....	63,599
Miscellaneous	3,315	.....	3,315
TOTALS	2,219,162	142,354	2,361,516

Summary

From October 1, 1907 to January 1, 1933

From Stoping	1,872,761
From Development	255,355
From Fills	233,400
TOTAL	2,361,516

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NEW YORK & HONDURAS ROSARIO MINING CO.

FIFTY-THIRD ANNUAL REPORT

NINETEEN HUNDRED AND THIRTY-THREE

REPORT of the
NEW YORK & HONDURAS
ROSARIO MINING CO.

NEW YORK

January 1, 1934

OFFICERS

LEWIS L. CLARKE, *President*
H. A. GUESS, *Vice-President*
A. R. GORDON, *Vice-President*
W. C. LANGLEY, *Treasurer*
J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY	DR. J. RALPH JACOBY
LEWIS L. CLARKE	W. C. LANGLEY
H. A. GUESS	M. F. SOTO
IRVING HEIDELL	AMBROSE G. TODD

DR. JULIUS J. VALENTINE

EXECUTIVE COMMITTEE

WM. A. PRENDERGAST, *Chairman*

SIDNEY ABBEY	IRVING HEIDELL
H. A. GUESS	AMBROSE G. TODD

DR. JULIUS J. VALENTINE

LEWIS L. CLARKE, W. C. LANGLEY } *Ex-Officio*

NEW YORK & HONDURAS ROSARIO MINING CO.

March 23, 1934.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company:

The Fifty-third Annual Report of your Company is made under conditions that should be pleasing and encouraging to you. The record of the year 1933 is especially gratifying, and we have reason to consider the future with confidence.

With this report there is also submitted the complete Annual Report of the Mine Office, so that you have before you the financial condition of the Company, and the physical aspects of the property owned by it.

Before entering upon a description of the different phases and results of the Company's affairs, I will state that for the excellent record set forth in this report, we are indebted to the advances in *silver* and *gold* prices which took place in 1933. I also wish strongly to commend the management of our property in Honduras.

The production of silver and gold during the year 1933 was the largest annual production in the Company's history. The figures are:

3,911,686$^{15}/_{100}$ ounces Silver for 1933, compared with
3,697,017$^{49}/_{100}$ ounces Silver for 1932, or an increase of
214,668$^{66}/_{100}$ ounces Silver,
17,210$^{63}/_{100}$ ounces Gold for 1933, compared with
16,054$^{281}/_{1000}$ ounces Gold for 1932, or an increase of
1,156$^{349}/_{1000}$ ounces Gold.

The average price obtained in 1933 for our silver was $.36524, compared with $.27678 in 1932, or an increase of $.08846.

The average cost per ounce for producing silver in 1933 was $.16503, compared with $.21210 in 1932, or a decrease of $.04707. This result is due to the increased price obtained for our gold, as the latter is reckoned as a by-product and its value reduces the cost of general operation.

The average price obtained in 1933 for our gold production was $28.0078 per ounce, compared with $20.67 in 1932.

Our operating expenses for 1933 were $962,842.43, compared with $970,439.22, or a decrease of $7,596.79. The New York Administration and General Expenses were $67,589.54 in 1933, compared with $64,466.29, or an increase of $3,123.25.

The net profit for 1933 carried to Surplus was $758,041.12, compared with $318,460.51 in 1932, or an increase of $439,580.61.

We have paid from the earnings of the year 1933 dividends of $659,324.56, or a rate of $3.50 per share, the largest annual dividends ever paid by this Company.

Our net profit from Operations in 1933, before the deduction of Federal Income Taxes, Expansion Expenses and Reserves, was $783,176.83, compared with $239,134.43, an increase of $544,042.40.

Our Income from Investments, etc., in 1933 was $101,183.14, compared with $111,312.85 in 1932, or a decrease of $10,129.71.

Our Gross Income (Operations and Investments, etc.) was $884,359.97, of which Operations contributed $88^{56}/_{100}\%$ and Investments $11^{44}/_{100}\%$.

During the year 1933 there were acquired 616 shares of the Company's Capital Stock, making the total now held in the Treasury 11,633 shares, which were purchased at an average price of $11.58.

There is submitted with this report and made a part hereof:

1. A Comparative Statement of Operations for the years 1933 and 1932.

2. A Comparative Income and Profit and Loss Statement for the years ended December 31, 1933, and December 31, 1932.

3. A Condensed Balance Sheet for the year ended December 31, 1933.

4. A Statement of the Surplus Account for the year ended December 31, 1933.

5. Securities held by the Company March 15, 1934.

6. A Table showing Bullion Production and Dividend Distribution to Stockholders from the organization of the Company to December, 1933.

7. A Comparative Statement of Net Assets for the years 1923 to 1933, inclusive.

It is with great pleasure that I record the friendly relations that exist between the Government and people of Honduras and ourselves, and on your behalf I extend to them our heartfelt thanks and expressions of good will.

Respectfully submitted,

LEWIS L. CLARKE,
President.

Comparative Statement of Operations

For the Years 1933 and 1932

	Year 1933	Year 1932	Increase *Decrease
Total Sales Value of Gold and Silver Recovered	$1,910,740.17	$1,355,117.43	$555,622.74
Tons of Ore Milled	147,100.	142,700.	4,400.
Ounces of Silver Recovered	3,911,686.15	3,697,017.49	214,668.66
Number of Ounces of Silver Recovered per Ton of Ore	26.59202	25.90762	.68440
Ounces of Gold Recovered	17,210.63	16,054.281	1,156.349
Number of Ounces of Gold Recovered per Ton of Ore	.11699	.11250	.00449
Sales Value of Silver Recovered	$1,428,707.58	$1,023,275.46	$405,432.12
Average Sales Value of Silver per Ounce	.36524	.27678	.08846
Average Cost of Silver per Ounce	.16503	.21210	*.04707
Average Profit on Silver per Ounce	.20021	.06468	.13553
Sales Value of Gold Recovered	482,032.59	331,841.97	150,190.62
Average Sales Value of Gold per ounce	28.0078	20.67	7.3378
Value of Silver Recovered per Ton of Ore	9.7125	7.1708	2.5417
Average Cost of Silver per Ton of Ore	4.3884	5.4950	*1.1066
Average Profit on Silver Recovered per Ton of Ore	5.3241	1.6758	3.6483
Value of Gold Recovered per Ton of Ore	3.2769	2.3255	.9514
Number of Bars of Bullion Shipped from Mine	2,366	2,260	106

Income and Profit and Loss Statement

For the Years Ended Dec. 31, 1933 and Dec. 31, 1932

	Year 1933	Year 1932	Increase *Decrease
Production of Gold and Silver	$1,910,740.17	$1,355,117.43	$555,622.74
Less: Freight and Expenses on Bullion	97,131.37	81,077.49	16,053.88
Operating Income	1,813,608.80	1,274,039.94	539,568.86
Deduct: Operating Expenses	962,842.43	970,439.22	*7,596.79
Operating Profit	850,766.37	303,600.72	547,165.65
Deduct: New York Administrative and General Expenses	67,589.54	64,466.29	3,123.25
Net Profit from Operations	783,176.83	239,134.43	544,042.40
Add: Income from Investments, etc.	101,183.14	111,312.85	*10,129.71
	884,359.97	350,447.28	533,912.69
Less: Other Deductions from Income [Note A]	55,489.68	10,724.20	44,765.48
Net Profit Before Federal Income Tax and Provision for Depletion	828,870.29	339,723.08	489,147.21
Deduct: Federal Income Tax	69,673.08	18,304.43	51,368.65
Net Profit for Year	759,197.21	321,418.65	437,778.56
Appropriated for Depletion from Earnings [Note B]	1,156.09	2,958.14	*1,802.05
Profit for the Year Carried to Surplus [Note C]	$ 758,041.12	$ 318,460.51	$439,580.61

NOTE "A": The year 1933 includes:

Expansion Expenses	$13,429.05
Obsolete Materials and Supplies	24,562.13
Federal Capital Stock and New York State Taxes	8,536.54
Loss on Securities Sold	8,808.48
Sundry Items	153.48
	$55,489.68

NOTE "B": Beginning with the year 1932, depletion has been taken on a percentage basis, in accordance with the Revenue Act of 1932. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Depletion deductions on ore mined from the newer discoveries are made for Income Tax purposes only.

NOTE "C": For purpose of comparison the amounts set aside from earnings for Insurance Reserves during the year 1932 in the amount of $11,663.53 have been excluded in the preparation of the above summary.

CONDENSED BA

As of Decem

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion of Mines	2,145,724.93	$ 854,275.07	
Plant, Buildings, Machinery and Equipment	1,812,456.76		
Less: Allowance for Depreciation	1,404,210.40	408,246.36	$1,262,521.43
Current—			
Cash		91,096.40	
Bullion at Smelters and In Transit—Less: Allowance for Expenses		329,018.24	
Broken Ore in Stopes and Mill Bins (at cost)		136,434.50	
Materials and Supplies (at cost)		236,933.63	
*U. S. Government and Other Marketable Securities (at cost)	$2,322,558.35		
Less: Allowance provided in prior years	63,479.51	2,259,078.84	
Accrued Interest	13,352.81	2,272,431.65	3,065,914.42
Other Assets—			
Sundry Accounts Receivable		3,487.86	
Loans Receivable—Government of Honduras and Municipalities		35,373.42	
Investment—Sabana Grande Honduras Mining Company (Nominal Value)		1.00	38,862.28
Deferred Charges—			
Supplies, Prepaid Expenses, Unexpired Insurance, etc.			186,798.23
			$4,554,096.36

*Market Value on December 31, 1933—$1,412,261.88

LANCE SHEET

BER 31, 1933

LIABILITIES

Current—			
Drafts Payable		$ 46,152.11	
Accounts Payable		52,008.59	
Federal Taxes—1933		78,156.56	$ 176,317.26
Reserve for Dividends (Payable January, 1934)			188,367.00
Capital—			
Capital Stock (Par $10.00 per share)			
Authorized and Issued (200,000 shares)	$2,000,000.00		
Less: In Treasury (11,633 shares)	116,330.00		
Outstanding .... (188,367 shares)		1,883,670.00	
Surplus—			
Earned	1,727,321.69		
Appreciation of Mines	$1,500,000.00		
Less: Depletion Earned	921,579.59	578,420.41	2,305,742.10	4,189,412.10
			$4,554,096.36

Surplus Account

For the Year Ended December 31, 1933

Surplus—December 31, 1932			$2,057,745.48
ADDITIONS			
Net earnings after provision for Federal taxes, per statement of Income and Expenses		$758,041.12	
Cancellation of Reserves provided during prior years			
Fire Insurance	$105,930.32		
Transit Insurance	42,794.11	148,724.43	
Sundry Surplus Adjustments—net		1,828.22	$908,593.77
DEDUCTIONS			
Dividends Paid and Provided for:			
April, 1933—$.37½ per share	70,675.96		
July, 1933—$.62½ per share	117,730.24		
October, 1933—$1.00 per share	188,367.00		
December, 1933 — $.50 per share	94,184.36		
Payable January, 1934 —$1.00 per share	188,367.00	659,324.56	
Cost of 616 shares of Company's Capital stock purchased during year	6,276.50		
Less: Par Value	6,160.00	116.50	
Allowance for depletion on appreciation of mine valuation		1,156.09	660,597.15
Net Increase for Year			247,996.62
Surplus—December 31, 1933			$2,305,742.10

Securities Held by

New York and Honduras Rosario Mining Company

March 15, 1934

BONDS:

Amount	Name
$141,400.00	U. S. Liberty Loan 4th—4¼%—due October 15, 1938.
163,000.00	U. S. Treasury Notes 3%—due April 15, 1937.
75,000.00	U. S. Treasury Notes 2¾%—due December 15, 1936.
75,000.00	U. S. Treasury Notes 3¼%—due August 1, 1936.
50,000.00	U. S. Treasury Notes 3¼%—due September 15, 1937.
10,000.00	New York State Bonds 3%, for Elimination of Grade Crossings—due July 1, 1937.
10,000.00	New York State Bonds 2¾%, for Emergency Unemployment Relief—due July 1, 1938.
10,000.00	New York State Bonds 2¾%, for Emergency Unemployment Relief—due July 1, 1939.
10,000.00	New York State Bonds 2¾%, for Emergency Unemployment Relief—due July 1, 1940.
10,000.00	New York State Bonds 3%, for General State Improvements—due July 1, 1941.
50,000.00	American Water Works and Electric Co., Inc., Deb. Bonds Series "A" 6%—due November 1, 1975.
50,000.00	Birmingham Gas Co., Gold Notes 6%—due October 1, 1935.
50,000.00	Brooklyn City R. R. First Consolidated Mtge. Bonds 5%—due July 1, 1941.
50,000.00	California-Oregon Power Co., Ref. Mtge. Gold Bonds 6½%—due May 1, 1942.
25,000.00	Chicago and Northwestern Railway Co., 1st and Ref. Mtge. 4½%—due May 1, 2037.
50,000.00	Chicago, Rock Island and Pacific R. R., 1st and Ref. Mtge. 4%—due April 1, 1934.
25,000.00	Cities Service Gas Co., 1st Mtge. Prior Lien Bonds 5½%—due May 1, 1942.
50,000.00	Electric Power and Light Corp., Gold Deb. Bonds 5%—due February 1, 2030.
25,000.00	Joplin Water Works Co., 1st Mtge. Series "A" 5%—due March 1, 1957.
5,000.00	Lehigh Power Securities Corp., Deb. Bonds Series "A" 6%—due February 1, 2026.
97,000.00	Mississippi Power and Light Co., 1st Mtge. Gold Bonds 5%—due December 1, 1957.
50,000.00	Monongahela West Penn. Public Service Co., 1st Lien and Ref. Mtge. Gold Bonds Series "B" 5½%—due February 1, 1953.
50,000.00	National Power and Light Deb. Bonds Series "B" 5%—due May 1, 2030.
25,000.00	New Orleans, Texas and Mexico Railway, 1st Series "A" 5½%—due April 1, 1954.
50,000.00	New York, Chicago and St. Louis, R. R. Co., Ref. Mtge. Series "C" 4½%—due September 1, 1978.
50,000.00	St. Louis and San Francisco Railway, Prior Lien Mtge. Bonds Series "B" 5%—due July 1, 1950.
50,000.00	Shell Union Oil Corp., Deb. Sinking Fund Bonds 5%—due May 1, 1947.
5,000.00	Texas Electric Service Co., 1st Mtge. Gold Bonds 5%—due July 1, 1960.

STOCKS:

No. of Shares	Name of Stock
1,000	American Chicle Co., Common Stock, No. Par.
400	American Gas and Power Co., $6.00 Cumulative 1st Preferred Stock, No Par.
1,000	American Smelting and Refining Co., 6% Cumulative Second Preferred Stock, Par Value $100.00.
500	American Water Works and Electric Co., $6.00 Cumulative Preferred Stock, No Par.
500	Arkansas Power and Light Co., $6.00 Cumulative Preferred Stock, No Par.
550	Commonwealth and Southern Corp., $6.00 Cumulative Preferred Stock, No Par.
500	Florida Power and Light Co., $7.00 Cumulative Preferred Stock, No Par.
600	Home Insurance Co., Capital Stock, Par Value $5.00.
500	Iowa Southern Utilities Co. of Delaware, 7% Cumulative Preferred Stock, Par Value $100.00.
500	Jersey Central Power and Light Co., 5½% Cumulative Preferred Stock, Par Value $100.00.
500	Louisiana Power and Light Co., $6.00 Cumulative Preferred Stock, No Par.
800	National Power and Light Co., $6.00 Cumulative Preferred Stock, No Par.
500	Ohio Edison Co., $6.00 Cumulative Preferred Stock, No Par.
500	Potomac Edison Co., 6% Cumulative Preferred Stock, Par Value $100.00.
500	Public Service Co. of Indiana, $7.00 Cumulative Prior Preferred Stock, No Par.
500	West Penn. Electric Co., 6% Cumulative Preferred Stock, Par Value $100.00.

TOTAL COST $2,159,190.54

Market Value, March 15, 1934 ..... $1,516,943.51

Board of Directors

New York & Honduras Rosario Mining Co.:

We made an examination of the books of account and record of NEW YORK & HONDURAS ROSARIO MINING CO., including the minutes of stockholders and directors meetings and the records of the mine office in Honduras, for the year ended December 31, 1933.

Cash, securities, and bullion were verified by actual count, inspection of certificates and documents, or by direct communication with depositories. Provision for depletion and depreciation, as in the past, represents the maximum amount permitted on book values under the Revenue Act of 1932.

Based upon such examination and information obtained by us, it is our opinion that the accompanying balance sheet and related income and surplus account show, in accordance with accepted principles of accounting consistently followed by the company during the year under review, its financial condition at December 31, 1933, and the results of its operations and changes in surplus for the year. No contingent liabilities were reported to us and none was disclosed by our examination.

ERNST & ERNST.

March 15, 1934.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
1925	1,763,023.16
1926	1,601,429.35
1927	1,341,300.06
1928	1,500,233.98
1929	1,477,710.79
1930	1,315,821.38
1931	1,403,104.20
1932	1,355,117.43
1933	1,910,740.17
	$48,096,488.68

Distribution to Stockholders

1887	No. 1	$ 37,500— 2½%	($ .25 per share) Dividend
1888	Nos. 2 to 8	112,500— 7½%	(.75 per share) Dividend
1889	Nos. 9 to 14	97,500— 6½%	(.65 per share) Dividend
1891	Nos. 15 to 17	45,000— 3%	(.30 per share) Dividend
1892	Nos. 18 to 22	187,500—12½%	(1.25 per share) Dividend
1893	Nos. 23 to 26	150,000—10%	(1.00 per share) Dividend
1896	Nos. 27 to 30	60,000— 4%	(.40 per share) Dividend
1897	Nos. 31 to 42	180,000—12%	(1.20 per share) Dividend
1898	Nos. 43 to 50	120,000— 8%	(.80 per share) Dividend
1899	Nos. 51 to 63	195,000—13%	(1.30 per share) Dividend
1900	Nos. 64 to 78	255,000—17%	(1.70 per share) Dividend
1901	Nos. 79 to 95	255,000—17%	(1.70 per share) Dividend
1902	Nos. 96 to 100	75,000— 5%	(.50 per share) Dividend
1903	No. 101	15,000— 1%	(.10 per share) Dividend
1904	Nos. 102 to 110	135,000— 9%	(.90 per share) Dividend
1905	Nos. 111 to 124	195,000—13%	(1.30 per share) Dividend
1906	Nos. 125 to 142	285,000—19%	(1.90 per share) Dividend
1907	Nos. 143 to 155	195,000—13%	(1.30 per share) Dividend
1908	Nos. 156 to 167	180,000—12%	(1.20 per share) Dividend
1909	Nos. 168 to 175	120,000— 8%	(.80 per share) Dividend
1910	Nos. 176 to 181	120,000— 8%	(.80 per share) Dividend
1911	No. 182	45,000— 3%	(.30 per share) Dividend
1912	Nos. 183 to 184	70,000— 3½%	(.35 per share) Dividend
1913	Nos. 185 to 189	220,000—11%	(1.10 per share) Dividend
1914	Nos. 190 to 194	260,000—13%	(1.30 per share) Dividend
1915	Nos. 195 to 199	280,000—14%	(1.40 per share) Dividend
1916	Nos. 200 to 207	400,000—20%	(2.00 per share) Dividend
1917	Nos. 208 to 212	260,000—13%	(1.30 per share) Dividend
1917	Nos. 1 and 2	140.000— 7%	(.70 per share) Amortization
1918	Nos. 213 to 216	200,000—10%	(1.00 per share) Dividend
1918	Nos. 3 to 6	200,000—10%	(1.00 per share) Amortization
1919	Nos. 217 to 220	200,000—10%	(1.00 per share) Dividend
1919	Nos. 7 to 10	200,000—10%	(1.00 per share) Amortization
1920	Nos. 221 to 226	320,000—16%	(1.60 per share) Dividend
1920	No. 11	40,000— 2%	(.20 per share) Amortization
1922	Nos. 227 to 230	200,000—10%	(1.00 per share) Dividend
1923	Nos. 231 to 235	250,000—12½%	(1.25 per share) Dividend
1924	Nos. 236 to 241	350,000—17½%	(1.75 per share) Dividend
1925	Nos. 242 to 249	400,000—20%	(2.00 per share) Dividend
1926	Nos. 250 to 257	400,000—20%	(2.00 per share) Dividend
1927	Nos. 258 to 265	400,000—20%	(2.00 per share) Dividend
1928	Nos. 266 to 274	450,000—22½%	(2.25 per share) Dividend
1929	Nos. 275 to 283	500,000—25%	(2.50 per share) Dividend
1930	Nos. 284 to 290	371,677—18¾%	(1.87½ per share) Dividend
1931	Nos. 291 to 297	364,159—18¾%	(1.87½ per share) Dividend
1932	Nos. 298 to 303	283.874—15%	(1.50 per share) Dividend
1933	Nos. 304 to 312	659,324—35%	(3.50 per share) Dividend
		$10,479,035	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 284, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00
Dividends 285 to 312, inclusive, were paid on outstanding capital stock.

Comparative Statement of Net Assets

FOR THE YEARS ENDED DECEMBER 31st AS BELOW

CURRENT ASSETS—	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Cash and Cash Items	$474,620	$ 146,298	$ 184,750	$ 94,999	$ 116,838	$ 382,693	$ 339,942	$ 41,578	$ 119,820	$ 150,019	$ 91,096
Marketable Securities	546,239	1,394,411	1,818,692	1,932,105	1,970,034	1,739,977	1,827,816	2,138,449	2,060,260	2,053,330	2,272,432
Bullion in Transit	307,157	261,416	263,334	242,857	222,503	316,758	230,726	213,368	231,552	186,653	329,018
Ore in Stopes and Mill Bin	88,245	107,375	77,385	77,665	88,477	90,160	118,908	143,843	89,779	103,562	136,434
Materials and Supplies	210,782	235,033	247,461	286,312	242,925	240,828	229,242	227,065	245,795	234,766	236,934
Total Current Assets	$1,627,043	$2,144,533	$2,591,622	$2,633,938	$2,640,777	$2,770,416	$2,746,634	$2,764,303	$2,747,206	$2,728,330	$3,065,914
Deduct: Current Liabilities	205,153	262,560	278,038	123,768	117,830	133,891	98,604	84,882	114,840	64,385	176,317
Net Current Assets	$1,421,890	$1,881,973	$2,313,584	$2,510,170	$2,522,947	$2,636,525	$2,648,030	$2,679,421	$2,632,366	$2,663,945	$2,889,597
OTHER ASSETS—											
Accounts Receivable, Investments, Deferred Charges, etc.	312,547	222,260	139,276	150,155	253,536	267,620	287,274	266,380	260,729	225,404	225,660
PERMANENT—											
‡Mines, Real Estate, Concessions, Buildings, Machinery, etc. (less Allowances for Depreciation)	2,030,539	2,032,953	2,030,457	2,012,815	1,973,712	1,947,457	1,918,040	1,933,697	1,919,621	1,928,399	1,908,247
*Total Net Assets	$3,764,976	$4,137,186	$4,483,317	$4,673,140	$4,750,195	$4,851,602	$4,853,344	$4,879,498	$4,812,716	$4,817,748	$5,023,504
Increase of Net Current Assets over Preceding Year		$460,083	$431,611	$196,586	$12,777	$113,578	$11,505	$31,391	$47,055†	31,579	225,652
Increase of Net Current Assets over December 31, 1923		$460,083	$891,694	$1,088,280	$1,101,057	$1,214,635	$1,226,140	$1,257,531	$1,210,476	$1,242,055	$1,467,707

* Represented by Capital Stock, Surplus, Reserves for Depletion, Contingencies, etc., with no adjustment for increased valuation of mines, etc.

† Decrease.

‡ Not adjusted for increased valuation of mines.

ANNUAL MINE REPORT

January 1, 1934.

To the Executive Office,
21 West Street,
New York, N. Y.

The following is a brief summary of this Company's mining operations during the fiscal and calendar year 1933.

Production

	1933	1932
Dry Tons Treated	147,100.	142,700.
Average Per Ton Troy Ozs. Silver Milled at the Mine	29.077	28.359
Average Per Ton Troy Ozs. Gold Milled at the Mine	.1241	.1193
Total Troy Ozs. Silver Milled at the Mine	4,277,197.	4,046,858.
Total Troy Ozs. Gold Milled at the Mine	18,255.	17,024.
Total Troy Ozs. Silver Produced at the Mine	3,918,091.	3,706,519.
Total Troy Ozs. Gold Produced at the Mine	17,183.	16,083.
Average Per Ton Troy Ozs. Silver Produced at the Mine	26.636	25.974
Average Per Ton Troy Ozs. Gold Produced at the Mine	.1168	.1127
Total Ozs. Silver Recovered at Smelters	3,911,686.	3,697,017.
Total Ozs. Gold Recovered at Smelters	17,210.	16,054.
Average Per Ton Silver Recovered at Smelters	26.592	25.907
Average Per Ton Gold Recovered at Smelters	.1170	.1125
Ratio of Gold to Silver	1.227	1.230
Bars of Doré Bullion	2,366.	2,260.
Bullion Fineness of Silver Recovered at Smelters	970.13	965.13
Bullion Fineness of Gold Recovered at Smelters	4.268	4.191

No Custom Ore or Bullion in 1933

The 1933 bullion production represents a record in the output of both silver and gold for any single year in the history of the Rosario Company.

The relative gold content of the ore milled during 1933 was slightly higher than that of the year 1932. No marked change in gold-silver ratio is anticipated during the year 1934.

The recent substantial increase in the market prices of both silver and gold, if maintained, dictates the advisability of mining lower grade ore than that treated during the past three years, ore which could not be profitably mined at then exisiting metal prices. A lower bullion production for 1934 can therefore be anticipated.

Honduras Operating Costs in U. S. Currency

	Tons 1933
Broken Ore in Stopes Reserve Jan. 1/33	25,433
Ore Mined—1933	155,751
Total Ore for 1933	181,184
Ore delivered to Mill in 1933	147,351
Broken Ore in Stopes Reserve Jan. 1/34	33,833
Broken Ore in Stopes Reserve as per measurement adjustments Jan. 1, 1934	446
Broken Ore in Stopes Reserve Actual Jan. 1, 1934	33,387
Total Troy Ounces Silver recovered	3,911,686
Total Troy Ounces Gold recovered	17,210.6
Feet Exploration and Development Driven	25,580
Diamond Drilling—Feet Driven	4,111

	Tons 1932
Broken Ore in Stopes Reserve Jan. 1/32	22,100
Ore Mined—1932	145,041
Total Ore for 1932	167,141
Ore delivered to Mill in 1932	142,354
Broken Ore in Stopes Reserve Jan. 1/33	24,787
Broken Ore in Stopes Reserve as per measurement adjustments Jan. 1, 1933	646
Broken Ore in Stopes Reserve Actual Jan. 1, 1933	25,433
Total Troy Ounces Silver recovered	3,697,017
Total Troy Ounces Gold recovered	16,054
Feet Exploration and Development Driven	23,022.5
Diamond Drilling—Feet Driven	1,978

YEAR—1933			Total Costs	YEAR—1932		Total Costs	Cost Per Ton 1933	Cost Per Ton 1932	Cost Per Ounce of Silver 1933	Cost Per Ounce of Silver 1932
MINING										
Labor		$315,491.19			$277,392.08					
Supplies		215,687.61			227,037.84					
Power		4,264.03			5,121.98					
Depreciation, Etc.		4,318.16			Cr. 2,613.42					
Ore Mined and Milled										
First of Year	$103,562.46			$ 89,779.10						
Last of Year	136,434.50	Cr. 32,872.04	$506,888.95	103,562.46	Cr. 13,783.36	$493,155.12	$3.45	$3.46	.1296	.1334
MILLING										
Labor		$ 52,209.14			$ 58,897.35					
Supplies		189,610.64			200,621.40					
Power		8,070.18			8,887.60					
Depreciation, Etc.		24,213.70	$274,103.66		22,761.52	$291,167.87	$1.86	$2.05	.0701	.0787
ADMINISTRATION										
Labor and Supplies		$156,766.60			$159,384.50					
Depreciation, Etc.		10,083.22	$166,849.82		11,731.73	$171,116.23	$1.13	$1.20	.0426	.0463
			$947,842.43			$955,439.22	$6.44	$6.71	.2423	.2584
Mine Yearly Concession Expense			15,000.00			15,000.00	.10	.11	.0038	.0041
			$962,842.43			$970,439.22	$6.54	$6.82	.2461	.2625
Credit for Gold			482,032.59			331,841.97	3.27	2.33	.1232	.0898
Net Cost of Silver			$480,809.84			$638,597.25	$3.27	$4.49	.1229	.1727

Honduras Operating Costs

Mining costs per ton for the year 1933 were the same as those of 1932. Mining costs, per Troy ounce bullion produced, were lower than those of 1932. These costs were effected notwithstanding the fact that 2,552 feet more of development were driven, and 2,132 feet more of diamond drilling was done, during the year. A large ore production from development excavations was the most important contributing factor in bringing about the above results.

Milling costs, both per ton milled and ounce bullion produced, were the lowest recorded in the history of Rosario operations. Reduction in milling costs was effected both in the items of labor and of supplies. Reduction in labor was effected through the elimination of much repair work, relatively heavy in 1932.

There was little change in per unit costs or unit consumption of cyanide, zinc dust and sulphur, but a substantial saving was made in metal wearing parts such as battery shoes, dies and liners. The record tonnage milled was chiefly responsible for reduction in milling costs.

Total Operating Costs show a reduction of $7,596.79 for the year.

THE MINE

Ore Reserves

The Active Ore Reserves as of January 1, 1934, summarized below, are based on silver at 40 cents per Troy ounce and gold at $30.00 per Troy ounce.

Summary—Active Reserves

	Tons of Ore Plus Waste	Avg. Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
Estimated Ore, at 13 and 14 cu. ft.	434,700	32.19	.1714	13,996,000	74.498
Broken Ore in Stopes, at 21 cu. ft.	33,387	29.07	.1241	970,560	4,143
TOTAL ACTIVE RESERVES	468,087	31.97	.1680	14,966,560	78,641

Estimated ore reserves at the end of 1933 show an increase of 187,154 tons containing approximately 6,395,963 ounces of Silver and 39,819 ounces of Gold over and above corresponding figures quoted in the 1932 report for such reserves. This increase in tonnage and grade of estimated ore reserves is particularly gratifying in view of the fact that during the year under review a record tonnage of 147,100 tons has been milled containing 4,277,197 ounces of Silver and 18,255 ounces of gold.

Summary—Inactive Reserves

	Tons of Ore Plus Waste	Avg. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
Estimated Ore, at 13 cu. ft.	48,000	15.03	.0483	721,900	2,322

The Inactive Ore Reserves on the San Joaquin and the Santa Gertrudis Veins were transferred to the Active Reserves list as being of workable grade with prevailing silver and gold prices.

In addition to the above ore reserves, there are certain reserves of prospective ore in the mine which are either not sufficiently developed to be included in the above estimate, or which, though developed, are of too low grade to be considered mineable with a 40c per ounce silver price.

Furthermore, it seems likely that further commercial ore bodies will be discovered from time to time. All such prospective reserves may prolong the life of the property for several years beyond expectancies of life indicated by the figure for estimated ore reserves quoted in this report.

Ore Production

	1933	1932	1931	1930	
By Stoping	102,471	123,018	118,979	69,391	tons
From Development Excavations	44,880	19,336	12,812	39,347	"
Total	147,351	142,354	131,791	108,738	"
Development feet driven	25,574	23,022.5	20,364.5	21,518	

The monthly ore production for the year 1933, from each vein, is shown in Annex "D."

The following table shows the comparison of the labor employed underground as well as at the several mine portals, shops and warehouses:

	1933	1932
Day Shifts	304	305
Average number of men per day shift	569	471
Night Shifts	304	305
Average number of men per night shift	83	58
Total man shifts	198,208	161,345

A marked increase in the number of men employed at the Mine during 1933 will be noted. This increase is attributable to three causes: First, compared to 1932 the mining of 5,000 tons more of ore; second, to the 2,551 feet more of exploration and development driven; and third, to the excessive timber, track and pipe repair work carried on during the year to overcome the necessary curtailment of such maintenance during the previous three years when low silver prices necessitated keeping maintenance work at a minimum.

The total footage driven in 1933 is shown in the following Summary of Annex "C":

Year	Drifts	Cross-cuts	Raises	Total
1933	12,620.5	6,100.5	6,853.0	25,574.0 feet
1932	11,985.0	6,757.5	4,280.0	23,022.5 "

The 1933 total footage exceeds that of 1932 by 2,551.5 feet and exceeds that of the previous record year, 1929, by 249 feet.

A relatively high percentage of drifting was done in ore, which accounts for the 30.5% of the production tonnage coming from development excavations, shown in the table under "Ore Production."

Operating Cross-cuts and Raises

Lower 650 Jucuara Cross-cuts

The Lower 650 main Jucuara Cross-cut mentioned in last year's report reached its objective in the early part of 1933. That objective was to obtain electric haulage access on the Mill level underneath the Jucuara Group of veins. Two branch cross-cuts were then started a short distance back from the face of the main one, that to the southeast directly under and parallel to the Lower 300 Jucuara Cross-cut, with the object of cutting Jucuara No. 1 Vein and at the same time permitting the driving of a main ore and a main waste chute to serve this district between the Lower 650 Mill Haulage and the Peña Blanca Levels. The Southwest branch cross-cut was started with the object of cutting the Jucuara No. 2 Vein at what is expected to be about the center of that ore body. The total footage driven in these cross-cuts during the year was 473 feet.

The urgency of securing in as short a time as possible an ore and a waste pass in the Jucuara section made it advisable to discontinue the two branch cross-cuts before reaching either of the two veins mentioned above. As soon as the passes are completed both branch cross-cuts will be continued until they cut the respective Jucuara veins. The Southeast cross-cut should intersect Jucuara No. 1 Vein within 200 feet. The Southwest cross-cut should enter the Jucuara No. 2 Vein at approximately 300 feet.

The main ore pass reached the Lower 300 Jucuara Cross-cut a few days before the end of 1933. At the same time the ore pass was being driven from the Lower 650 ft. level to the Lower 300 level its upward extension was being driven from the Lower 300 to the Peña Blanca level and should reach this level, the Upper 150, some time in January, 1934.

The waste pass should reach the Lower 300 ft. level in January, 1934, and its extension above the Lower 300 has already been completed to the Zero level, which is as far as it will be driven.

Waste above the Peña Blanca level will be handled by the Peña Blanca electric haulage. Subsidiary branch dumping raises will have to be driven at each of the levels from the Zero down to the Lower 650. Such work, together with stripping the raises, should be completed during the first quarter of 1934 and the substantial Jucuara ore bodies will then be available for ready extraction and delivery to the Mill. Active development which is at the present time being carried on in this section will be greatly cheapened by the elimination of the present long tram to the Esperanza ore and waste passes.

Material Handling Raise

In conjunction with the ore and waste passes, a vertical shaft raise was started from the Lower 300 ft. level in the Jucuara section with the object of running it through to the Peña Blanca level. There an electric hoist is to be installed to handle supplies serving the entire Jucuara section. This shaft raise, as it is called, should be in service from the Peña Blanca level down to the Lower 300 in the latter part of 1934. The ultimate objective is to complete the shaft raise to the Lower 650 ft. level. Work on that section of it, below the Lower 300 ft. level, will be carried on in conjunction with the development of the Jucuara veins on the Lower 400 and Lower 500 ft. levels.

Lower 650 Santa Fe Cross-cut

As soon as the Jucuara cross-cut work was stopped on the Lower 650 ft. level, a branch cross-cut was started on the same level from the Lower 650 Esperanza cross-cut where it intersects the San Benito Vein. It was driven a distance of 1,000 feet in a southeasterly direction to carry the Mill Electric Haulage under a substantial ore body opened up during the year on a branch of the main Santa Fe Vein. This branch vein is named, and will be so referred to in this report, as the "Santa Fe No. 2 Vein." The downward extent of the vein was cut at a distance of 650 feet from the Esperanza cross-cut. The cross-cut was continued another 350 feet as an exploration cross-cut, resulting in the exposure of several likely-looking stringers in the vicinity of the main vein.

In the latter part of 1933 two raises were started from the cross-cut, one in waste to serve as an ore pass for the ore body in question, the other on the vein, to serve as a manway and for ventilation purposes. These raises are to be driven to the Lower 400 ft. level, which is the lowest level on which this ore body has been developed and should be completed during the first half of 1934. Their completion will make available for cheap mining this substantial ore body.

West Vein Cutoff

Inasmuch as the Lower 650 Jucuara Cross-cut was started from the end of old workings on the West Vein it was decided, upon completion of the Lower 650 Santa Fe Cross-cut, to improve the haulage facilities into the Jucuara section by a straight and properly graded cutoff around the old workings. This work is now in progress. During the last two months of 1933, 401 feet were driven. Our program calls for approximately 800 feet of cutoff work to put the Lower 650 haulage in first class condition for efficient ore delivery.

Porvenir Adit Cross-cut, Upper 150 Ft. Level

The purpose of this cross-cut was fully explained in last year's report. It was completed during the year 1933 by the driving of 334 feet. Installation of a new 10 in. compressed air pipe line through this cross-cut will be started in January, 1934. When this work is completed the Porvenir Adit will be made the main entrance for part of the mine crew, shortening appreciably the distance labor has to walk.

Stations

In addition to the cross-cuts mentioned above, driven primarily to facilitate operating conditions, a substantial amount of station work was done on the various levels, in conjunction with the Jucuara ore and waste passes and the material raise, totalling for the year, 741 feet.

Exploration Cross-cuts

Lower 400 Esperanza Cross-cut

The installation of a blower and 2,500 feet of ventilation pipe placed this purely exploration cross-cut in condition for continuation into the southern unexplored territory, the largest territory available for future exploration. Driving of this cross-cut was again started late in 1933 and 265 feet were driven. Its continuation will be actively prosecuted during the year 1934. The original line of the cross-cut will be followed for at least another 1,000 feet, which line will follow the general contour of the western, or Tegucigalpa side of the range. This work will be given preference although it is proposed to continue a branch cross-cut near the present face of the main cross-cut. The branch cross-cut is directed toward the heart of the mountain, in a southeasterly direction, but diverging from the main one at an angle of about 60 degrees. This territory is so large that one cross-cut is insufficient to explore it thoroughly.

Lower 300 Jucuara Cross-cut

Driving of the Lower 650 Jucuara Cross-cut exposed some likely looking stringers before reaching the Jucuara district proper. Consistent with all Rosario ore bodies at this level, these stringers are low grade but show sufficient mineralization and formal structure to warrant their exploration at a higher horizon. For such exploration the Lower 300 Jucuara Cross-cut, which exposed the present good Jucuara ore bodies, is being continued. The direction, however, has been changed, paralleling that of the Lower 650 level but offset from it in a vertical plane 250 feet southwest. Continuation of this cross-cut was started late in 1933 and only 190 feet were driven. During the year 1934 it will be driven continuously or until the upper reaches of the stringers mentioned above have been cut. The Southwest fault, which is apparently a large one, nearly parallels these cross-cuts and may affect the upward extension of the stringers cut in the Lower 650 Cross-cut. Should the present cross-cut fail to intersect any veins within the next 300 feet, another parallel cross-cut will be started from the Jucuara section from the extreme east end of the Jucuara No. 3 vein at this same level. The possibility of one or the other of these cross-cuts cutting a new ore body during the year 1934 is considered reasonably good.

In connection with the exploration work outlined, it is proposed to raise from the Lower 650 level in the vicinity of these mineralized stringers to facilitate their exploration as well as that of the lower reaches of the Southwest and Santa Gertrudis Veins, all in the same territory.

Upper 150 Jucuara-Salvador Cross-cut

Although the main object of this cross-cut, driven in 1931, was to facilitate development and ore delivery to the Lower 650 level of the Jucuara ore bodies, and to explore any possible extension of the Salvador vein, its continuance as an exploration cross-cut is warranted. Only 120 feet were driven during the year because active development of the Salvador Vein and the Jucuara No. 1 Vein above the Peña Blanca or 150 ft. level precluded much exploration work in this district. Completion of the Jucuara hoist station alongside this cross-cut, together with switching and dumping stations, will again make it possible to continue the cross-cut in a southerly direction to explore territory westward of the faulted section of the Independencia and San Benito Veins. It is proposed to continue it in the latter part of 1934 if operating conditions permit. It will be run more or less parallel to the Esperanza cross-cuts but distant some 500 feet westward. It should in time cut the westerly extension of the San Blas Vein and any possible westward faulted section of the Independencia. If productive of good results, it should be continued as opportunity permits.

Veins Worked in 1933

The 1933 ore production came from 9 veins. These were the Salvador, Independencia, San Benito, Santa Fe, South San Miguel, Jucuara No. 1, 2, 3 and 4.

The following is a brief description of work done in each during 1933:

Salvador Group

Salvador Vein

The heaviest production in 1933, as in 1932, came from the Salvador Vein. 49,239 tons, or 33.4% of the total production came from stoping and development excavations in this vein, compared with 55,755 tons in 1932. Exploration and development footage amounted to 5,226 feet as compared with 5,946 feet in 1932.

During the year 1934 the Salvador Vein will continue to be a relatively large producer. The possibilities for future development and exploration in it are, however, limited. Development westward on all the levels from the Upper 250 to the Lower 300 has terminated in a strong fault. Development westward on the Lower 400 level, though still in progress, has not responded favorably, and lacks but 500 feet of encountering the same fault mentioned above. Further exploration westward of the fault will be done during 1934 in an effort to locate any possible extension of the Salvador, although on all the levels this vein shows a tendency to split up into minor stringers some distance before reaching the fault. There still remains above the Upper 250 level a small territory yet to be explored but the chances of developing any considerable tonnage are considered remote.

The production from the Salvador during 1934 will average lower in grade than that obtained in 1933.

Jucuara No. 1-Fortuna

Development and exploration of this vein amounted to 6,549 feet. 18,896 tons of ore were produced of which 16,794 came from development excavations.

Development in this vein was carried on continuously throughout the year from both the Jucuara and the Esperanza ends of the Upper 250, the Upper 150, the Zero and the Lower 300 ft. levels. On the Lower 200 ft. level it was possible to develop from only the Jucuara end, which level has now nearly reached the junction of the vein with the Fortuna and the Salvador in the vicinity of the Esperanza Cross-cuts. Lateral extremities have been fairly well determined. Raises are being driven from the Upper 250 ft. level to determine its upper ore limits. Indications are that the vein will continue in good ore to at least the Upper 350 ft. level.

But one stope, that on the Upper 150 ft. level, is being worked at the present time.

The gold content is relatively low, conforming more to that of the Salvador and Fortuna Veins.

Future developed ore reserves on this vein during the year 1934 will probably keep pace with ore extraction.

Independencia Group

Independencia Vein

The output from this vein in 1933 was 18,323 tons or 12.5% of the total, compared with 19,699 tons in 1932. Exploration and development amounted to 1,356 feet.

The decreased production from this vein is largely accounted for by the fact that most of the developed ore stoped during the year was in faulted and fractured sections where mining had to be carried on mostly by waste filled stoping methods, thereby retarding the quick extraction of ore already developed.

Apart from the Lower 500 ft. level, this vein below the Zero shows poor possibilities for future exploration and development. The chances of developing a fair amount of medium grade ore above the Zero level are considered good and active exploration will be carried on in this section during 1934.

The 600 ft. cross-cut mentioned in last year's report, which was started at the Upper 150 ft. level off the San Blas Vein, cut, in the latter part of 1933, a 10 inch vein of fair grade. This vein will be actively developed during the year, laterally and above the Upper 150 level.

A fair tonnage of good grade ore still remains in the Independencia and its production in 1934 should compare favorably with that of 1933.

San Blas Vein

Although no work was done on the San Blas during 1933 it will be possible at present silver prices to extract some low grade ore still remaining. No further development is planned in it until its western extension is cut by the Upper 150 Salvador-Jucuara Cross-cut.

Santa Fe Group

San Benito Vein

The output from this vein amounted to 10,611 tons, or 7.2% of the total, compared with 11,259 tons in 1932. Exploration and development amounted to 744.5 feet, compared with 810.5 feet in 1932.

The San Benito Vein has in late years been the highest relative gold producer, but its ore reserves were practically depleted during 1933. Development possibilities of this vein are considered fair on its western extension and also above the Upper 250 ft. level. It is planned during the year to develop this vein westward on the Zero level and if possible, on one of the lower levels. These west faces at the present time show a very narrow vein but of good gold content.

Production from this vein in 1934 will be limited, compared with that of 1933.

Santa Fe

The Santa Fe Vein produced 34,495 tons, or 23.4% of the total, of good grade ore in 1933, compared with 44,195 tons in 1932. Exploration and development in this vein amounted to 3,123.5 feet, compared with 1,583.5 feet in 1932.

The good gold bearing ore reserves on the main Santa Fe Vein were practically depleted in 1933. A branch vein of the main Santa Fe developed in 1932, first on the Lower 250 ft. level, showed fair ore, particularly high in gold, and indications were that better ore should be encountered below. Consequently, in 1933, a cross-cut was run on the Lower 400 ft. level, from a relatively barren vein south of the Santa Fe to cut the downward reaches of this Santa Fe stringer, which is now and henceforth will be known as the Santa Fe No. 2 Vein. The cross-cut entered this vein in very high grade ore, over 5 ft. wide at the point of intersection. Lateral development on the Lower 400 has exposed a good body of ore with the highest gold assays encountered in recent years. Two development raises were run from the Lower 400 to the Lower 250 ft. level, both in good ore. Development of this ore body on the lower 400 level exposed another branch vein which will be known as the Santa Fe No. 3 which had already been developed on the Lower 250 ft. level. Although this vein is not as high grade nor as good in structure as the Santa Fe Vein No. 2, it has a relatively good ore reserve already blocked out.

As already mentioned under the heading of the "Lower 650 Santa Fe Cross-cut" it is deemed advisable to postpone the active mining of this ore for delivery to the Mill until its cheaper extraction is made available by raises from the Lower 650 ft. Cross-cut. The stringers cut by this cross-cut on the Lower 650 ft. level indicate that additional branch veins may be encountered on the Lower 500 ft. level. There is every reason to believe that the Santa Fe No. 2 Vein should continue in good grade ore to the Lower 500 ft. level and at prevailing silver and gold prices development on the Lower 650 ft. level is warranted.

The raises already started from the Lower 650 ft. level should reach the Lower 400 in the early part of 1934 and the latter part of the year should show a good production from this new section

of the Santa Fe Vein, both as regards tonnage and grade of ore. Production from it will have a marked effect on increasing the gold output. The completion of the raises just mentioned will also permit more active development of this territory, by means of drifting and cross-cutting from the Santa Fe No. 2 Vein, particularly on its westward extension where the possibilities of encountering other ore bodies are considered reasonably good.

Development on this vein above the Lower 250 ft. level did not respond favorably as the vein is cut off by a strong fault, nearly parallel to the strike of the vein, a few feet above the Lower 250 ft. level. It was hoped to find the upper extension of this vein in the hanging wall of the fault by diamond drilling. Such work gave negative results. It is planned, however, further to explore this possibility by means of at least one cross-cut, preferably from the Lower 200 ft. level into the hanging wall of the fault.

Other stringers off the main Santa Fe Vein in its western extension are planned to be cut by a cross-cut from the Lower 400 ft. level.

South San Miguel

The small production from this vein of 1,696 tons, or 1.1% of the total, came entirely from stoping operations on the South San Miguel Stringer above the Upper 150 ft. level. No development and exploration was done in this section during the year 1933 but it is planned to do so in 1934. The possibility of making available a fair amount of low grade ore, between the ore body worked in 1933 and the vein's intersection with the Esperanza Cross-cut, a distance of 200 feet, warrants such development.

Jucuara Group

The Jucuara No. 2, 3 and 4 Veins form a group so closely allied through faulting and fracturing, with branch stringers running from one to the other, that they will be treated as one group. The total output from this group for 1933 was 14,091 tons, of which 14,055 tons came entirely from development excavations. Exploration and development during the year amounted to 6,688 feet.

Jucuara No. 2

During the year 1933 the Jucuara No. 2 Vein responded favorably to development, as may be noted from the additional ore reserves shown on it, compared with those of 1932. Development throughout the year was confined entirely to the Lower 300 and 200 ft. levels. Development on these levels will be continued during 1934 as well as on the Zero and Lower 400 ft. levels where there is good reason to expect the disclosure of further substantial reserves.

The western extremity of this vein on the Lower 300 ft. level has entered a faulty and badly fractured territory and as this territory is virgin in so far as exploration is concerned, it is premature to predict how far ore may be expected in that direction. The possibility of again picking up the vein in good ore in its westward extension is considered fair. No work was done during 1933 on the eastern end of the vein, which was developed during 1932, until it pinched to a very narrow stringer.

Development of additional ore reserves in this vein can be expected to keep pace with ore production from it during 1934.

Jucuara No. 3

Development of this vein during 1933 was confined to the Lower 200 and 300 ft. levels, with a limited amount on the Lower 400. Westward of the Lower 300 Jucuara Cross-cut this vein merges with the Jucuara No. 2 and its western extension seems to be limited by that intersection.

No work was done on its eastern developed extremity during the year as on the Lower 300 level it pinched to a narrow, practically barren stringer. Development of the upper levels and also of the Lower 400 will be carried eastward to see if these horizons show any improvement over the Lower 300.

A raise on this vein, completed in 1933 from the Lower 650 to the Lower 300 ft. level, indicates that workable values on this vein may not go lower than the Lower 400 ft. level. That level is being actively developed and its advance westward will soon make possible development of Jucuara No. 2 at the same level where the two veins probably join. Present indications are that the length of Jucuara Vein No. 3 may be considerably shortened in the upper levels as the two veins dip toward each other on the Lower 200 ft. level. The work planned in 1934 will disclose whether or not the two veins become one between the Zero and the Lower 200 levels. The chief field for further exploration of this vein is in its upper reaches and not laterally, although there are some stringers leaving it on the developed levels which may lead into new ore bodies.

Jucuara No. 4

This is a narrow, erratic stringer off Jucuara No. 2, the length of which when fully developed, will probably not exceed 600 feet. This vein is characterized by small, scattered stringers closely related, frequently coming together, making small bodies of good grade ore. It was developed in 1933 on the Lower 300 ft. level and its lateral extent is well defined. A raise on it from the Lower 300, and now nearly to the Lower 200, has disclosed better ore and a more formal vein above. Plans are being made to develop it fully on the upper levels in conjunction with work on the Jucuara No. 2 and No. 3 Veins.

General

As soon as the ore and waste passes between the Lower 650 and the Lower 300 ft. levels are in operation, early in 1934, the Jucuara Veins will be ready for stoping. Although a good grade of ore may be expected and the favorable factor of a good gold ratio exists, mining of these ore bodies will be relatively costly. The walls are loose and a high percentage of the ore bodies on the Jucuara No. 2 will have to be mined slowly by cut and fill methods. Although the ratio of gold to silver on these veins is very encouraging, this ratio can not be greatly depended upon inasmuch as the high gold content seems to be closely associated with the faulted and fractured sections of the veins. As the veins enter undisturbed ground values seem to decrease greatly.

The fractured zone in which the Jucuara No. 2, 3 and 4 lie, forms a complicated network requiring extensive development in proportion to ore blocked out. The general results of such development, however, can be considered as favorable. The Jucuara section still presents an inviting field for intensive future exploration.

Veins Not Worked

Among the veins not worked during 1933 exist some having low grade ore reserves which it will be possible to work during 1934, providing present silver and gold prices are maintained. Among these are the Capitana, with isolated bodies of fair gold ore in a very narrow vein, and the San Joaquin, which also contains scattered ore bodies of good gold ratio. Opportunities for development exist on Veta No. 4.

Diamond Drilling

The total amount of diamond drilling in 1933 was 4,110 feet, compared with 1,978 feet during the latter part of 1932, at which time diamond drilling was initiated.

The cost per foot of hole drilled in 1933, including depreciation on the machine, was $3.91 per foot compared with $4,53 in 1932. 11 holes were drilled during the year, varying from 140 feet in depth to 600 feet. All of the holes drilled were horizontal, from already developed veins, with the main object of determining the existence of any branch veins in the vicinity of those already developed. The results for the year can be considered reasonably gratifying. No large ore bodies were disclosed by this drilling, but some small veins were encountered, worthy of further exploration by cross-cutting.

During 1934 it is planned to drill into entirely unexplored territory remote from any known ore deposits. The main exploration cross-cuts, those of the Lower 400 Esperanza and Lower 300 Jucuara, particularly, afford good locations from which to explore by diamond drilling.

Mine Equipment

The total number of drifting and stoping machines was added to during the year, to take care of increased operations, besides those normally added to replace worn-out equipment. The new drill sharpener which was purchased during the year, together with one purchased during 1932 to replace old ones, completes the sharpening equipment to meet the needs of the mine for some years to come.

THE MILL

Tonnage Crushed

	1933	1932
Total wet tons received	161,145.58	154,958.63
Average per cent moisture	8.5602	8.1344
Total dry tons milled	147,100	142,700
Average tons per day milled (365 days)	403	391
Average tons per day milled, full running time	447	425
Average tons per day milled, per 1850-lb. stamp	22.4	21.2
Number of 1850-lb. stamps	20	20
Total tons treated by mill to December 31, 1933	2,342,508	2,195,408

Recovery

	1933	1932
Average ounces silver received per ton	29.077	28.359
Total ounces silver received	4,277,197	4,046,858
Average ounces silver recovered per ton	26.636	25.974
Total ounces silver recovered	3,918,091	3,706,519
Average silver recovered, per cent	91.604	91.590
Average ounces gold recovered per ton	.1241	.1193
Total ounces gold received	18,255	17,024
Total ounces gold recovered per ton	.1168	.1127
Total ounces gold recovered	17,183	16,083
Average gold recovery, per cent	94.118	94.468

Supplies Used

	1933 Per ton of ore crushed	1932 Per ton of ore crushed	1933 Per oz. fine bullion produced Grade of Ore	1932 Per oz. fine bullion produced Grade of Ore
	147,100 Tonnage	142,700	Ag. 29.077 Au. .1241	Ag. 28.359 Au. .1193
Cyanide (100% KCN)	5.007191 lbs.	4.947380 lbs.	.187169	.189656
Steel Balls	.....	.014054 "	.....	.000537
Zinc Dust	.863385 "	.825180 "	.032273	.031632
Muriatic Acid	.063766 "	.064751 "	.002384	.002482
Lime	17.202753 "	16.520560 "	.643037	.633289
Foreign Pebbles	.....	.927120 "	.....	.035540
Borax Glass	.026513 "	.032936 "	.000991	.001263
Soda	.005235 "	.011563 "	.000196	.000443
Fuel Oil	.044935 gals.	.049741 gals.	.001680	.001907
Tube Mill Rock	65.390890 lbs.	63.597757 lbs.	2.444303	2.437918
Sulphur	2.316111 "	2.371479 "	.086576	.090907

Treatment Period Detail

	1932				1931			
	Hrs.	Min.	Ag. %	Au. %	Hrs.	Min.	Ag. %	Au. %
Extraction by Crushing Solution	9	00	37.78	76.23	9	0	39.38	80.72
Extraction by Agitation	83	14	54.09	18.05	81	31	52.60	14.08
Extraction in Slime Presses	1	5	.28	.56	1	5	.32	.59
	93	19	92.15	94.84	91	36	92.30	95.39
Less: Dissolved Value Loss			.55	.73			.71	.92
Recovery			91.60	94.11			91.59	94.47
Percent sand not passing 150 mesh			24.478				20.681	

Ore Analysis

	1933	1932	1931	1930	1929	1928
Silica (SiO_2)	70.22%	71.65%	70.72%	71.36%	73.98%	74.15%
Alumina (Al_2O_3)	11.80%	11.17%	10.82%	9.76%	10.00%	13.57%
Iron, metallic	2.85%	3.32%	3.91%	4.03%	3.84%	3.45%
Manganese	0.63%	0.51%	0.66%	0.64%	0.48%	0.83%
Zinc	2.11%	2.06%	1.26%	1.64%	0.49%	0.50%
Antimony	0.011%	0.02%	0.01%	0.009%	0.016%	Trace
Arsenic	0.012%	0.013%	0.016%	0.012%	0.021%	0.04%
Lead	0.45%	0.61%	0.35%	0.37%	0.27%	0.29%
Sulphur	1.77%	2.02%	1.81%	1.83%	1.60%	1.25%
Copper	0.051%	0.05%	0.555%	...	...	...
Lime (CaO)	1.17%	1.11%	0.75%	0.90%	0.68%	0.57%
Magnesia (MgO)	2.14%	0.64%	1.03%	1.72%	1.84%	0.49%

POWER

	1933	1932
Rainfall		
Total rainfall, inches	55.02	53.25
Number of rainy days	190	191
Greatest monthly rainfall	11.31 (Oct.)	9.38 (June)
Lowest monthly rainfall	.38 (Feb.)	.75 (Feb.)
Greatest single rainfall	2.43 (Oct.)	1.97 (Oct.)

POWER DISTRIBUTION

	1933		1932	
	Kilowatt Hours	K.W. Hours Per Ton	Kilowatt Hours	K.W. Hours Per Ton
Ventilation	7,970	.054	.....	.....
Mine Power	2,538,930	17.260	2,564,440	17.971
Electric Haulage	176,600	1.201	175,990	1.233
Blacksmithing	33,100	.225	36,300	.254
Mine Lights	20,800	.141	18,000	.126
Hoisting	26,700	.182	26,500	.186
Mill Power	5,392,215	36.657	4,784,210	33.526
Mill Lights	37,830	.257	28,000	.196
Surface Lights	590,100	4.012	338,700	2.374
Surface Power	111,400	.757	126,730	.888
Machine Shop	117,600	.799	97,500	.683
Laboratory	18,095	.123	22,760	.159
Totals	9,071,340	61.668	8,219,130	57.596
Power Production by:				
San Juancito Plant	54.52%		52.38%	
Guadalupe Plant	32.24%		36.81%	
Aguacatal Plant	13.24%		10.81%	
	100.00%		100.00%	

COST OF POWER PRODUCTION

	1933			1932		
	Amount U.S.Cy.	Per Ton	K.W. Hour	Amount U.S.Cy.	Per Ton	K.W. Hour
Labor	$11,051.01	.07513	.0012182	$11,027.62	.07728	.0013417
Supplies	3,220.03	.02189	.0003550	4,048.19	.02837	.0004925
Total	$14,271.04	.09702	.0015732	$15,075.81	.10565	.0018342

Based on Horsepower Generated:

	1933	1932
Horsepower Hours	12,159,973	11,017,599
Cost per Horsepower Hour	$ 0.001174	$ 0.001368
Cost per Horsepower Year	$10.28424	$11.98368
Cost per Horsepower Year, Decrease	$ 1.69944	

Power Output

The greater power output, that of 9,071,340 K.W. during 1933, compared with 8,219,130 K.W. in 1932, is attributable largely to an increased supply of water from mine workings, and through the Mine by means of the West Cross-cut, completed during 1932.

The various power plants continued to function efficiently during the year and no major repairs or replacements are contemplated for 1934.

OTHER DEPARTMENTS

Medical Department

	1933	1932
Cost of maintenance	$ 7,035.22	$ 7,117.31
Total consultations, examinations and treatments	13,339	12,098

This department operated normally during the year and contributed largely to the elimination of the smallpox epidemic which threatened this district in 1932. Influenza was more prevalent than usual in 1933 but it was kept under control and no serious cases resulted.

Assay Office and Laboratory

	1933	1932
Total number assays run	29,052	28,764
Average number of assays per day	80	79
Total cost	$ 6,573.50	$ 6,533.80
Cost per assay	.23	.23

Schools

	1933	1932
Average Daily Attendance During Year:		
Boys' School	132	111
Girls' School	121	131
Rosario Mixed School	52	58
Rosario Foreign School	8	5
Total Expense Native and Foreign Schools	$ 9,615.42	$12,457.87
Decrease	2,842.45	

The marked decrease in the maintenance of the native schools during 1933, compared with 1932, is not due to less attendance or reduction in teaching staff, but to the fact that the Government re-arranged the school term during 1933 so that the school year begins the first of May instead of the first of February as formerly; consequently the native schools were not in session during the months of February, March and April. It is therefore anticipated that during 1934 expenses covering schools will be more in conformity with those which obtained in 1932.

Police and Garrison

	1933	1932
Total maintenance expense	$15,657.22	$15,265.04
Increase	392.18	

Hotel

	1933	1932
Total number of meals served	30,142	29,306
Total cost	$16,084.41	$16,865.78
Cost per meal	0.534	0.579

The decrease in cost per meal is assigned chiefly to the larger number of employees served during the year, resulting in less overhead expense per meal in this department.

Roads

	1933	1932
Total maintenance	$ 9,513.96	$ 5,648.45
Increase	3,865.51	

Road maintenance in 1933 was relatively heavy due to the copious rains in October, in which month 20% of the total rainfall was recorded. Another contributing factor to this heavy maintenance came about through the necessity of continual repairs to facilitate the excessive freighting carried on during the year in the delivery of the new steel tanks.

Agencies

	1933	1932
Total expense	$ 3,709.27	$ 3,688.49
Increase	20.78	

EXPANSION

Four gold mining prospects in Honduras were further explored during 1933, and some work upon them will be continued in a small way in 1934.

In concluding this summary of the essential conditions and features of our present work, may I say that, should the accomplishments of the year, just closed, be viewed as creditable, full recognition is due the members of the staff for their hearty cooperation and earnest efforts to further such results.

Sincere appreciation must be expressed of the help and consideration accorded the management, by the Officers and Board of Directors in furthering all efforts toward the continued success of this enterprise.

Respectfully submitted,

K. H. MATHESON,

Acting General Manager.

Annex "A"

Active Ore Reserves*

ESTIMATED RESERVES (13 and 14 cu. ft. per ton)	Av. width, feet			Tons of ore plus waste	Av. Troy ounces per ton		Total Troy ounces	
	Vein	Waste	Stoping		Ag.	Au.	Ag.	Au.
Veins								
Independencia Group								
Independencia	2.13	2.47	4.60	32,700	30.	.10	981,000	3,270
Salvador Group								
Salvador ...	1.96	2.06	4.02	80,000	29.	.10	2,320,000	8,000
Jucuara No. 1 —Fortuna	2.71	1.62	4.33	132,500	34.	.08	4,505,000	10,600
Jucuara Group								
Vein No. 2..	3.44	2.54	5.98	54,800	36.	.32	1,972,800	17,536
Vein No. 3..	1.94	2.06	4.00	19,700	16.	.24	315,200	4,728
Vein No. 4..	3.43	1.73	5.16	21,600	35.	.16	756,000	3,456
Santa Fe Group								
Santa Fe Vein No. 1	2.46	2.46	4.92	6,000	25.	.13	150,000	780
Vein No. 2	3.00	1.62	4.62	46,300	47.	.42	2,176,100	19,446
Vein No. 3	1.76	1.90	3.66	19,500	25.	.24	487,500	4,680
San Benito ..	1.04	2.42	3.46	7,000	14.	.10	98,000	700
San Joaquin	1.00	2.33	3.33	9,600	14.	.12	134,400	1,152
Santa Gertrudis .	1.00	2.33	3.33	5,000	20.	.03	100,000	150
				434,700	32.19	.1714	13,996,000	74,498

BROKEN ORE IN STOPES (21 cu. ft. per ton) Veins	
Independencia	4,395
Salvador	21,503
Jucuara No. 1—Fortuna	902
Santa Fe No. 1	2,161
San Benito	960
South San Miguel Stringer	1,341
Mine Storage Chutes	1,450
Mill Bin	675
	33,387

Summary—Active Reserves

Estimated Ore at 13 and 14 cu. ft.	434,700	32.19	.1714	13,996,000	74,498
Broken Ore in Stopes, at 21 cu. ft.	33,387	29.07	.1241	970,560	4,143
TOTAL ACTIVE RESERVES AS OF JANUARY 1, 1934	468,087	31.97	.1680	14,966,560	78,641

*Note: While it is inherently probable that the tonnages and grades when actually mined from these individual veins will vary somewhat, up or down, from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

Annex "B"

Inactive Ore Reserves

ESTIMATED RESERVES (13 cu. ft. per ton) Veins	Tons of ore plus waste	Ounces per ton Ag.	Au.	Total ounces Ag.	Au.
Carmen	10,000	16.	.03	160,000	300
Fortuna Group	5,000	16.	.04	80,000	200
Culebra	3,000	16.	.05	48,000	150
South San Miguel	8,800	15.	.05	132,000	440
Southwest	8,800	16.	.04	140,800	332
Capitana	3,000	10.	.13	30,000	390
Catalina	3,000	14.	.05	42,000	150
Colonia	2,000	14.	.07	28,000	140
Esperanza	1,500	15.	.05	22,500	75
Porvenir	2,000	13.	.05	26,000	100
Socorro	900	14.	.05	12,600	45
TOTAL INACTIVE RESERVES AS OF JANUARY 1, 1934	48,000	15.03	.0483	721,900	2,322

Annex "C"

Veins and Groups	Drifts	Cross-cuts	Raises	Total Feet
Independencia Group				
Independencia	123.0	638.0	595.0	1,356.0
Salvador Group				
Salvador	3,097.0	667.5	1,461.5	5,226.0
Jucuara No. 1—Fortuna	4,303.5	126.5	2,119.0	6,549.0
Jucuara Group				
Jucuara No. 2	2,896.0	1,327.0	1,482.0	5,705.0
Jucuara No. 3	606.5	72.5	304.0	983.0
Santa Fe Group				
Santa Fe	1,035.5	1,373.0	715.0	3,123.5
San Benito	413.0	155.0	176.5	744.5
Esperanza Stringer	146.0	.....	.....	146.0
Esperanza Cross-cut				
Lower 400	.....	265.0	.....	265.0
Station Cross-cuts				
Upper 150	.....	332.5	.....	332.5
Zero	.....	20.0	.....	20.0
Lower 200	.....	105.5	.....	105.5
Lower 300	.....	96.0	.....	96.0
Lower 400	.....	27.0	.....	27.0
Lower 500	.....	74.0	.....	74.0
Lower 650	.....	86.0	.....	86.0
Other Cross-cuts				
Lower 650 Cut-offs	.....	401.0	.....	401.0
Porvenir	.....	334.0	.....	334.0
TOTALS	12,620.5	6,100.5	6,853.0	25,574.0

ORE PRODUCTION

Annex "D"

Veins	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
From Stoping Operations:													
Independencia Group	862	974	1,674	1,091	1,084	1,707	1,775	1,556	1,752	1,388	1,371	1,576	16,810
Salvador Group													
Salvador	3,826	3,664	3,577	2,191	1,614	3,142	3,797	4,027	4,015	4,611	4,148	3,072	41,684
Jucuara No. 1—Fortuna	....	312	110	172	85	4	31	112	98	185	476	517	2,102
Jucuara Group													
Jucuara No. 2, No. 3 and No. 4	36	....	....	....	....	....	....	....	....	....	....	....	36
Santa Fe Group													
Santa Fe	4,834	4,050	3.617	2,623	2,260	2,213	1,874	1,470	1,742	1,192	1,440	2,308	29,623
San Benito	529	431	801	1,251	956	744	909	1,038	1,006	1,297	1,002	556	10,520
So. San Miguel Str.	126	....	149	173	....	14	104	102	85	77	331	535	1,696
TOTALS	10,213	9,431	9,928	7,501	5,999	7,824	8,490	8,305	8,698	8,750	8,768	8,564	102,471
From Development Excavations:													
Independencia Group	24	37	255	198	....	....	....	4	150	335	255	255	1,513
Salvador Group													
Salvador	503	401	509	407	749	724	653	704	877	672	680	676	7,555
Jucuara No. 1—Fortuna	....	698	1,056	700	752	1,412	2,112	2,507	1,635	2,196	1,697	2,029	16,794
Jucuara Group													
Jucuara No. 2	1,381	513	458	679	1,016	1,438	1,206	1,485	744	1,079	717	904	11,620
Jucuara No. 3	....	....	69	52	232	447	354	171	279	209	364	258	2,435
Santa Fe Group													
Santa Fe	177	179	147	183	416	469	405	472	424	442	693	865	4,872
San Benito	....	....	....	....	....	....	....	77	14	....	....	....	91
TOTALS	2,085	1,828	2,494	2,219	3,165	4,490	4,730	5,420	4,123	4,933	4,406	4,987	44,880
GRAND TOTALS	12,298	11,259	12,422	9,720	9,164	12,314	13,220	13,725	12,821	13,683	13,174	13,551	147,351

Annex "E"

TONNAGE MINED

From October 1, 1907, to January 1, 1934

Veins	Total including Stoping, Devel. & Filling Oct. 1, 1907, to Dec. 31, 1932	Total including Stoping, Devel. and Filling Year 1933	Grand total including Stoping, Devel. and Filling Jan. 1, 1934
Buena Ventura	98,490	.....	98,490
Candelaria Group	166,573	.....	166,573
Capitana	54,268	.....	54,268
Carmen	18,365	.....	18,365
Catalina	6,587	.....	6,587
Colonia	56,438	.....	56,438
Concepción	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	106,245	.....	106,245
Esperanza	8,710	.....	8,710
Fortuna Group	84,454	.....	84,454
Guadalupe	61,177	.....	61,177
Independencia	194,049	18,323	212,372
Jucuara No. 2, 3 and 4	6,007	14,091	20,098
Jucuara No. 1-Fortuna	.....	18,896	18,896
North	4,647	.....	4,647
Northwest	89,320	.....	89,320
Nueva	28,147	.....	28,147
Porvenir	1,711	.....	1,711
Rosario	150,915	.....	150,915
Salvador	393,560	49,239	442,799
San Benito	57,924	10,611	68,535
San Blas	5,052	.....	5,052
San Joaquin	63,030	.....	63,030
San Luis	2,389	.....	2,389
San Miguel North	174,801	.....	174,801
San Miguel Group	122,854	1,696	124,550
Santa Fe	135,319	34,495	169,814
Santa Gertrudis	30,789	.....	30,789
Socorro	22,592	.....	22,592
Southwest	20,509	.....	20,509
Termópilas	1,094	.....	1,094
West	97,005	.....	97,005
Veta No. 4	5,001	.....	5,001
Ore from Development	63,599	.....	63,599
Miscellaneous	3,315	.....	3,315
TOTALS	2,361,516	147,351	2,508,867

Summary

From October 1, 1907, to January 1, 1934

From Stoping	1,975,232
From Development	300,235
From Fills	233,400
TOTAL	2,508,867

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NEW YORK and HONDURAS ROSARIO MINING COMPANY



FIFTY-FOURTH ANNUAL REPORT

NINETEEN HUNDRED AND THIRTY-FOUR

REPORT of the
NEW YORK and HONDURAS
ROSARIO MINING COMPANY

NEW YORK

January 1, 1935

OFFICERS

WM. A. PRENDERGAST, *President*
H. A. GUESS, *Vice-President*
W. C. LANGLEY, *Treasurer*
J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

LEWIS L. CLARKE, *Chairman*
H. A. GUESS
IRVING HEIDELL
DR. J. RALPH JACOBY
W. C. LANGLEY
LESTER S. OPPENHEIMER
WM. A. PRENDERGAST
M. F. SOTO
AMBROSE G. TODD
DR. JULIUS J. VALENTINE

EXECUTIVE COMMITTEE

LEWIS L. CLARKE, *Chairman*
H. A. GUESS
IRVING HEIDELL
AMBROSE G. TODD
DR. JULIUS J. VALENTINE
WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

NEW YORK AND HONDURAS ROSARIO MINING COMPANY

February 20, 1935.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company:

It is a great pleasure to present to you the Fifty-fourth Annual Report of your Company, containing a record which shows that the year 1934 was a satisfactory one.

In a circular addressed to you on January 30, 1934, it was stated:

> "The Company has paid from its 1933 *earnings* dividends amounting to $3.50 a share. This is the largest annual dividend payment in the history of the Company, and was rendered possible by the mining and milling of higher than average grade ore and by the higher prices obtained for silver and gold since last April.
>
> "At these prices for silver and gold, which it is reasonable to suppose will continue for quite some time, there are considerable tonnages of lower grade ore in the mine which can be treated profitably and thereby tend to prolong the profitable life of your property. Therefore, beginning with this year and during a continuance of these prices for silver and gold, these lower grade ores will be utilized. The general average grade of the monthly tonnage will be lower, but nevertheless of sufficient gold and silver content to permit the payment of a satisfactory dividend for the year 1934."

The policy outlined has been followed, and the opinion expressed therein concerning earnings, justified. It is intended to adhere to this same policy during the current year, assuming that no developments (now unexpected) should require a different course.

Silver production during 1934 was:
3,091,521 5/100 ounces, compared with
3,911,686 15/100 ounces, for 1933, a decrease of
820,164 5/100 ounces, which decrease is accounted for by our observance of the policy already referred to.

Gold production for 1934 was:
12,995 682/1000 ounces, compared with
17,210 630/1000 ounces for 1933, a decrease of
4,214 948/1000 ounces.

The average cost per ounce for producing silver in 1934 was $.22670, compared with $.16503 in 1933, an increase of $.06167.

The average price obtained in 1934 for silver was $.48856, compared with $.36524 in 1933, an increase of $.12332.

The average price obtained for our gold production in 1934 was $35.0214 an ounce, compared with $28.0078 in 1933, an increase of $7.0136.

Our operating expenses in 1934 were $1,002,804.88, compared with $962,842.43 in 1933, an increase of $39,962.45.

The New York Administration and General Expenses in 1934 were $70,659.99, compared with $67,589.54 in 1933, an increase of $3,070.45.

The net profit for 1934 carried to Surplus was $761,459.76, compared with $758,041.12 for 1933, an increase of $3,418.64.

We have paid from the earnings of the year 1934 dividends of $753,468.00, or at a rate of $4.00 a share, the largest annual dividends paid by this Company since its organization.

The earnings per share in 1934 were $4.04, compared with $4.02 in 1933.

Our Income from Investments, and other sundry items, in 1934 was $94,928.88, compared with $101,183.14 in 1933, a decrease of $6,254.26.

Our Gross Income (Operations and Investments, etc.) was $904,459.93, of which Operations contributed 89.504% and Investments 10.496%.

There is submitted with this report and made a part hereof

1. A Comparative Statement of Operations for the years 1934 and 1933;

2. A comparative Income and Profit and Loss Statement for the years ended December 31, 1934, and December 31, 1933;

3. A Balance Sheet for the year ended December 31, 1934;

4. A statement of the Surplus Account for the year ended December 31, 1934;

5. A list of the Securities held by this Company December 31, 1934, no change having taken place up to the date of this report.

6. A Table showing Bullion Production and Dividend Distribution to Stockholders from the organization of the Company, including all the dividends paid from the earnings of the year 1934.

I desire to call attention to the resignation of Mr. Adam Rolla Gordon as Vice-President and General Manager. Mr. Gordon entered the service of this Company in 1907. He became General Manager of our property in Honduras in 1916. He left Honduras in October, 1933, for a well-earned vacation, and to seek restoration of health. On November 2, 1934, he tendered his resignation, effective December 31, 1934. Mr. Gordon's twenty-seven

years of service cover exactly half the history of this Company, and his material contribution to its success is gratefully acknowledged.

Mr. Kenneth H. Matheson, who has been associated with this Company for twenty-one years, and who for the past twelve years has been Acting General Manager when Mr. Gordon was absent from the property, was appointed General Manager, as of January 1, 1935.

It is my sad duty to record the death on January 13, 1935, of Mr. Sidney Abbey, who was Vice-President from 1915 to 1919, and a member of the Board of Directors of this Company for twenty-four years. Mr. Abbey attended the regular meeting of our Board of Directors on January 8th, 1935. In his death our Company has lost a very able and always deeply interested friend.

Our relations with the Government and people of Honduras continue to be animated by the same cordiality which has always been their distinguishing characteristic, and we extend to them the assurance of our grateful appreciation.

Respectfully submitted,

WM. A. PRENDERGAST,
President.

Comparative Statement of Operations
New York and Honduras Rosario Mining Company
For the Years 1934 and 1933

For the purpose of comparison, we show as follows, details pertaining to mine production and operation during the past two years.

	Year 1934	Year 1933	Increase *Decrease
Total Sales Value of Gold and Silver Recovered	$1,965,520.68	$1,910,740.17	$ 54,780.51
Tons of Ore Milled	155,100	147,100	8,000
Ounces of Silver Recovered	3,091,521.56	3,911,686.15	*820,164.59
Number of Ounces of Silver Recovered per Ton of Ore	19.93244	26.59202	*6.65958
Ounces of Gold Recovered	12,995.682	17,210.630	*4,214.948
Number of Ounces of Gold Recovered per Ton of Ore	.08378	.11699	*.03321
Sales Value of Silver Recovered	$1,510,393.41	$1,428,707.58	$ 81,685.83
Average Sales Value of Silver per Ounce	$ .48856	$ .36524	$ .12332
Average Cost of Silver per Ounce	$ .22670	$ .16503	$ .06167
Average Profit on Silver per Ounce	$ .26186	$ .20021	$ .06165
Total Sales Value of Gold Recovered	$ 455,127.27	$ 482,032.59	$*26,905.32
Average Sales Value of Gold per Ounce	$ 35.0214	$ 28.0078	$ 7.0136
Value of Silver Recovered per Ton of Ore	$ 9.7382	$ 9.7125	$ .0257
Average Cost of Silver per Ton of Ore	$ 4.5188	$ 4.3884	$ .1304
Average Profit on Silver Recovered per Ton of Ore	$ 5.2194	$ 5.3241	$ *.1047
Value of Gold Recovered per Ton of Ore	$ 2.9344	$ 3.2769	$ *.3425
Number of Bars of Bullion Shipped from Mine	1,861	2,366	*505

Income and Profit and Loss Statement
New York and Honduras Rosario Mining Company
For the Years Ended Dec. 31, 1934 and Dec. 31, 1933

	Year 1934	Year 1933	Increase *Decrease
Production of Gold and Silver	$1,965,520.68	$1,910,740.17	$ 54,780.51
Less: Freight and Expenses on Bullion	82,524.76	97,131.37	*14,606.61
Operating Income	1,882,995.92	1,813,608.80	69,387.12
Deduct: Operating Expenses	1,002,804.88	962,842.43	39,962.45
Operating Profit	880,191.04	850,766.37	29,424.67
Deduct: New York Administrative and General Expenses	70,659.99	67,589.54	3,070.45
Net Profit from Operations	809,531.05	783,176.83	26,354.22
Add: Income from Investments, etc.	94,928.88	101,183.14	*6,254.26
	904,459.93	884,359.97	20,099.96
Less: Other Deductions from Income [Note A]	63,302.66	55,489.68	7,812.98
Net Profit Before Federal Income Tax and Provision for Depletion	841,157.27	828,870.29	12,286.98
Deduct: Federal Income Tax	74,657.08	69,673.08	4,984.00
Net Profit for Year	766,500.19	759,197.21	7,302.98
Appropriated for Depletion from Earnings [Note B]	5,040.43	1,156.09	3,884.34
Profit for Year Carried to Surplus	$ 761,459.76	$ 758,041.12	$ 3,418.64
Note "A": Other deductions from Income include:			
Expansion Expenses	$ 17,201.43	$ 13,429.05	$ 3,772.38
Obsolete Materials and Supplies	866.50	24,562.13	*23,695.63
Federal Capital Stock Tax and State Franchise Tax	7,241.82	8,536.54	*1,294.72
Loss on Securities Sold—net	36,599.80	8,808.48	27,791.32
Sundry Items	1,393.11	153.48	1,239.63
	$ 63,302.66	$ 55,489.68	$ 7,812.98

NOTE "B": Beginning with the year 1932, depletion has been taken in tax returns on a percentage basis in accordance with the Revenue Act of 1932. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Depletion deductions on ore mined from the newer discoveries are made for Income Tax purposes only.

BALANC

AS OF DECE

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion of Mines	2,155,805.79	$ 844,194.21	
Buildings, Machinery and Equipment	1,898,789.76		
Less: Allowance for Depreciation	1,440,915.35	457,874.41	$1,302,068.62
Current—			
Cash		217,227.93	
Bullion at Smelters and In Transit—Less: Allowance for Expenses		224,464.23	
Broken Ore in Stopes and Mill Bins (at cost)		186,068.87	
Inventories—Materials and Supplies (at cost)		261,048.79	
U. S. Government and Other Marketable Securities (at cost)	$2,139,331.79		
Less: Provision to adjust to market values	614,762.62	1,524,569.17	
Accrued Interest		13,442.50	1,538,011.67	2,426,821.49
Other Assets—			
Sundry Accounts Receivable		1,567.02	
Loans and Advances—Government of Honduras and Municipalities		32,668.83	
Investment—Sabana Grande Honduras Mining Company (Nominal Value)		1.00	34,236.85
Deferred Charges—			
Supplies, Prepaid Expenses, Unexpired Insurance Premiums, etc.			174,572.55
			$3,937,699.51

E SHEET

MBER 31, 1934

LIABILITIES

Current—				
Drafts Payable			$ 23,870.46	
Accounts Payable			52,726.21	
Federal Taxes—1934			79,449.08	$ 156,045.75
Reserve for Dividends (Payable January, 1935)				141,275.25
Capital—				
Capital Stock (Par $10.00 per share)				
Authorized and Issued				
	200,000 shares	$2,000,000.00		
Less: In Treasury				
	11,633 shares	116,330.00		
Outstanding .....188,367 shares			1,883,670.00	
Surplus—				
Earned		1,183,328.53		
Appreciation of				
Mines	$1,500,000.00			
Less: Depletion				
Earned	926,620.02	573,379.98	1,756,708.51	3,640,378.51
				$3,937,699.51

NOTE:—After adjustment of securities to market value.

Surplus Account

New York and Honduras Rosario Mining Company

For the Year Ended December 31, 1934

Surplus—December 31, 1933—Per Former Report			$2,305,742.10
ADDITIONS			
Net earnings for the year after provision for Federal Taxes, per Statement of Income and Expenses			761,459.76
			3,067,201.86
DEDUCTIONS			
Dividends Paid and Provided for:			
April, 1934—$.75 per share	$141,275.25		
July, 1934—$.75 per share	141,275.25		
October, 1934—$.75 per share	141,275.25		
December, 1934—$1.00 per share	188,367.00		
Payable January, 1935—$.75 per share	141,275.25	$753,468.00	
Allowance for depletion on appreciation of mine valuation		5,040.43	
Additional provision to adjust book value of marketable securities to market value at December 31, 1934		551,283.11	
Sundry Surplus Charges		701.81	1,310,493.35
Surplus—December 31, 1934			$1,756,708.51

NOTE:—After adjustment of securities to market value.

Marketable Securities
New York and Honduras Rosario Mining Company
December 31, 1934

	Par Value	
U. S. Government Securities—		
Liberty Loan 4th—4¼%—1938	$ 41,200.00	
Liberty Loan 4th—4¼% (called for redemption)	60,100.00	
Treasury Notes 3¼%—1936	75,000.00	
Treasury Notes 2¾%—1936	75,000.00	
Treasury Notes 3%—1937	163,000.00	
Treasury Notes 3¼%—1937	50,000.00	
Treasury Notes 2½%—1938	40,100.00	$504,400.00
New York State and City Bonds—		
New York State:		
Elimination of Grade Crossings 3%—1937	10,000.00	
Emergency Unemployment Relief 2¾%—1938	10,000.00	
Emergency Unemployment Relief 2¾%—1939	10,000.00	
Emergency Unemployment Relief 2¾%—1940	10,000.00	
General State Improvements 3%—1941	10,000.00	
New York City:		
Special Revenue 4%—1935	25,000.00	75,000.00
Railroad Bonds—		
Brooklyn City R. R., First Consolidated Mortgage 5%—1941	50,000.00	
Chicago and Northwestern Railway Co., 1st Ref. Mtge. 4½%—2037	25,000.00	
Chicago, Rock Island and Pacific R. R., 1st Ref. Mtge. 4%—1934	50,000.00	
New Orleans, Texas and Mexico Railway, Series "A" 5½%—1954	25,000.00	
New York, Chicago and St. Louis R. R. Co., Ref. Mtge. Series "C" 4½%—1978	50,000.00	
St. Louis and San Francisco Railway, Prior Lien Mtge. Series "B" 5%—1950	50,000.00	250,000.00
Public Utility Bonds—Domestic—		
American Water Works and Electric Co., Gold Deb. Series "A" 6%—1975	50,000.00	
Birmingham Gas Co., Gold Notes 6%—1935	50,000.00	
California-Oregon Power Co., Ref. Mtge. 6½%—1942	50,000.00	
Cities Service Gas Co., 1st Mtge. Prior Lien 5½%—2030	25,000.00	
Electric Power and Light Corp. Gold Deb. 5%—2030	50,000.00	
Joplin Water Works Co., Series "A" 1st Mtge. 5%—1957	25,000.00	
Lehigh Power Securities Corp., Series "A" Deb. 6%—2026	5,000.00	
Mississippi Power and Light Co., 1st Mtge. Gold Bonds 5%—1957	50,000.00	
Monongahela West Penn Public Service Co., 1st Lien Series "B" 5½%—1953	50,000.00	
National Power and Light, Series "B" Deb. 5%—2030	50,000.00	
Texas Electric Service Co., 1st Mtge. Gold Bonds 5%—1960	5,000.00	410,000.00

Other Bonds—		
Tokyo Electric Light Co., Ltd., 1st Mtge. 6%—1953	50,000.00	
Shell Union Oil Corp., 5% Deb. Sinking Fund Bonds—1947	50,000.00	100,000.00

Stocks—

	Number of Shares
American Chicle Co., Common Stock, No Par	1,000
American Gas & Power Co., $6.00 First Preferred Cumulative, No Par	400
American Smelting and Refining Co., 6% Second Preferred Cumulative, Par $100.00	1,000
American Water Works and Electric Co., $6.00 Cumulative First Preferred, No Par	500
Arkansas Power and Light Co., $6.00 Cumulative Preferred, No Par	500
Commonwealth and Southern Corp., $6.00 Cumulative Preferred, No Par	550
Florida Power and Light Co., $7.00 Cumulative Preferred, No Par	500
Home Insurance Co., Capital Stock, Par $5.00	600
Iowa Southern Utilities Co. of Delaware, 7% Cumulative Preferred, Par Value $100.00	500
Jersey Central Power and Light Co., 5½% Cumulative Preferred, Par Value $100.00	500
Louisiana Power and Light Co., $6.00 Cumulative Preferred, No Par	500
National Power and Light Co., $6.00 Cumulative Preferred, No. Par	800
Ohio Edison Co., $6.00 Cumulative Preferred	500
Potomac Edison Co., 6% Cumulative Preferred, Par Value $100.00	500
Public Service Co. of Indiana, $7.00 Prior Cumulative Preferred, No Par	500
West Pennsylvania Electric Co., 6% Cumulative Preferred, Par Value $100.00	500

Market Value—December 31, 1934 ..... $1,524,569.17

Report of Auditors

Board of Directors

New York and Honduras Rosario Mining Company:

We have made an examination of the Balance Sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY —NEW YORK, N. Y., as at December 31, 1934, and of the statements of Income and Surplus for the year ended on that date. In connection therewith, we examined or tested accounting records of the Company and other supporting evidence at the New York Office including the minutes of stockholders and directors' meetings; we examined reports received from the mine office in Honduras and also made a general review of the accounting methods and an audit of the operating and income accounts at the New York Office for the year.

Cash, securities, and bullion were verified by actual count, inspection of certificates and documents, or by direct communication with depositories. Provision for depletion and depreciation, as in the past, represents the maximum amount permitted on book values under Federal Revenue Acts.

In our opinion, based upon our examination and information submitted to us, the accompanying Balance Sheet and related statements of Income and Surplus show, in accordance with accepted principles of accounting consistently followed by the company during the year under review, its financial condition at December 31, 1934, and the results of its operation and changes in surplus for the year then ended. No contingent liabilities were reported to us and none was disclosed by our examination.

ERNST & ERNST.

New York, February 13, 1935.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
1925	1,763,023.16
1926	1,601,429.35
1927	1,341,300.06
1928	1,500,233.98
1929	1,477,710.79
1930	1,315,821.38
1931	1,403,104.20
1932	1,355,117.43
1933	1,910,740.17
1934	1,965,520.68
	$50,062,009.36

Distribution to Stockholders

1887	No. 1	$ 37,500— 2½%	($ .25 per share) Dividend
1888	Nos. 2 to 8	112,500— 7½%	(.75 per share) Dividend
1889	Nos. 9 to 14	97,500— 6½%	(.65 per share) Dividend
1891	Nos. 15 to 17	45,000— 3%	(.30 per share) Dividend
1892	Nos. 18 to 22	187,500—12½%	(1.25 per share) Dividend
1893	Nos. 23 to 26	150,000—10%	(1.00 per share) Dividend
1896	Nos. 27 to 30	60,000— 4%	(.40 per share) Dividend
1897	Nos. 31 to 42	180,000—12%	(1.20 per share) Dividend
1898	Nos. 43 to 50	120,000— 8%	(.80 per share) Dividend
1899	Nos. 51 to 63	195,000—13%	(1.30 per share) Dividend
1900	Nos. 64 to 78	255,000—17%	(1.70 per share) Dividend
1901	Nos. 79 to 95	255,000—17%	(1.70 per share) Dividend
1902	Nos. 96 to 100	75,000— 5%	(.50 per share) Dividend
1903	No. 101	15,000— 1%	(.10 per share) Dividend
1904	Nos. 102 to 110	135,000— 9%	(.90 per share) Dividend
1905	Nos. 111 to 124	195,000—13%	(1.30 per share) Dividend
1906	Nos. 125 to 142	285,000—19%	(1.90 per share) Dividend
1907	Nos. 143 to 155	195,000—13%	(1.30 per share) Dividend
1908	Nos. 156 to 167	180,000—12%	(1.20 per share) Dividend
1909	Nos. 168 to 175	120,000— 8%	(.80 per share) Dividend
1910	Nos. 176 to 181	120,000— 8%	(.80 per share) Dividend
1911	No. 182	45,000— 3%	(.30 per share) Dividend
1912	Nos. 183 to 184	70,000— 3½%	(.35 per share) Dividend
1913	Nos. 185 to 189	220,000—11%	(1.10 per share) Dividend
1914	Nos. 190 to 194	260,000—13%	(1.30 per share) Dividend
1915	Nos. 195 to 199	280,000—14%	(1.40 per share) Dividend
1916	Nos. 200 to 207	400,000—20%	(2.00 per share) Dividend
1917	Nos. 208 to 212	260,000—13%	(1.30 per share) Dividend
1917	Nos. 1 and 2	140,000— 7%	(.70 per share) Amortization
1918	Nos. 213 to 216	200,000—10%	(1.00 per share) Dividend
1918	Nos. 3 to 6	200,000—10%	(1.00 per share) Amortization
1919	Nos. 217 to 220	200,000—10%	(1.00 per share) Dividend
1919	Nos. 7 to 10	200,000—10%	(1.00 per share) Amortization
1920	Nos. 221 to 226	320,000—16%	(1.60 per share) Dividend
1920	No. 11	40,000— 2%	(.20 per share) Amortization
1922	Nos. 227 to 230	200,000—10%	(1.00 per share) Dividend
1923	Nos. 231 to 235	250,000—12½%	(1.25 per share) Dividend
1924	Nos. 236 to 241	350,000—17½%	(1.75 per share) Dividend
1925	Nos. 242 to 249	400,000—20%	(2.00 per share) Dividend
1926	Nos. 250 to 257	400,000—20%	(2.00 per share) Dividend
1927	Nos. 258 to 265	400,000—20%	(2.00 per share) Dividend
1928	Nos. 266 to 274	450,000—22½%	(2.25 per share) Dividend
1929	Nos. 275 to 283	500,000—25%	(2.50 per share) Dividend
1930	Nos. 284 to 290	371,677—18¾%	(1.87½ per share) Dividend
1931	Nos. 291 to 297	364,159—18¾%	(1.87½ per share) Dividend
1932	Nos. 298 to 303	283,874—15%	(1.50 per share) Dividend
1933	Nos. 304 to 312	659,324—35%	(3.50 per share) Dividend
1934	Nos. 313 to 321	753,468—40%	(4.00 per share) Dividend
		$11,232,503	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 284, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00
Dividends 285 to 321 inclusive, were paid on outstanding capital stock.

ANNUAL MINE REPORT

January 1, 1935.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company:

This Company's mining operations in Honduras during the fiscal and calendar year 1934 are summarized in the following report:

Production

	1934	1933
Dry Tons Treated	155,100.	147,100.
Average Per Ton—Troy Ozs. Silver Milled at the Mine	21.819	29.077
Average Per Ton—Troy Ozs. Gold Milled at the Mine	.0928	.1241
Total Troy Ozs. Silver Milled at the Mine	3,384,096.	4,277,197.
Total Troy Ozs. Gold Milled at the Mine	14,393.	18,255.
Total Troy Ozs. Silver Produced at the Mine	3,101,357.	3,918,091.
Total Troy Ozs. Gold Produced at the Mine	13,019.	17,183.
Average Per Ton—Troy Ozs. Silver Produced at the Mine	19.996	26.636
Average Per Ton—Troy Ozs. Gold Produced at the Mine	.0839	.1168
Ratio of Gold to Silver	1:238	1:228
Bars of Doré Bullion	1,861.	2,366.
Bullion Fineness of Silver	976.48	971.30
Bullion Fineness of Gold	4.099	4.260
Custom Ore and Au. Bullion — Not Included		
Troy Ozs. Gold	129.	

The outstanding feature of the 1934 production is the tonnage treated of 155,100 tons, or 8,000 more than the highest previous record, that of 1933.

The decrease in the production of both silver and gold during the year 1934 compared to 1933 is in line with the policy recommended in last year's report. That policy was to take advantage of improved metal prices to mine ore which, at prices obtaining during previous years, could not be mined and treated at a profit.

Much low grade ore, now profitably minable, still remains. Since it is highly advisable to extract some of this each month if current silver and gold prices are more or less maintained throughout the year, a slightly lower bullion production may be anticipated for 1935.

Honduras Operating Costs in U. S. Currency

	Tons 1934
Broken Ore in Stopes Reserve 1/1/34	33,387
Ore Mined—1934	168,318
Total Ore for 1934	201,705
Ore delivered to Mill in 1934	154,985
Broken Ore in Stopes 1/1/35	46,720
Broken Ore in Stopes Reserve measurement adjustments 1/1/35	1,000
Broken Ore in Stopes Reserve Actual 1/1/35	45,720
Total Troy Ounces Silver produced	3,101,357
Total Troy Ounces Gold produced	13,019
Feet Exploration and Development Driven	31,837
Diamond Drilling—Feet Driven	4,325

	Tons 1933
Broken Ore in Stopes Reserve 1/1/33	25,433
Ore Mined—1933	155,751
Total Ore for 1933	181,184
Ore delivered to Mill in 1933	147,351
Broken Ore in Stopes 1/1/34	33,833
Broken Ore in Stopes Reserve measurement adjustments 1/1/34	446
Broken Ore in Stopes Reserve Actual 1/1/34	33,387
Total Troy Ounces Silver produced	3,918,091
Total Troy Ounces Gold produced	17,183
Feet Exploration and Development Driven	25,580
Diamond Drilling—Feet Driven	4,110

YEAR—1934			Total Costs	YEAR—1933		Total Costs	Cost Per Ton 1934	Cost Per Ton 1933	Cost Per Ounce of Silver 1934	Cost Per Ounce of Silver 1933
MINING										
Labor		$339,768.22			$315,491.19					
Supplies		238,476.40			215,687.61					
Power		4,608.72			4,264.03					
Depreciation, Etc.		4,962,02			4,318.16					
Ore Mined and Milled										
First of Year	$136,434.50			$103,562.46						
Last of Year	186,068.87	Cr. 49,634.37	$538,180.99	136,434.50	Cr. 32,872.04	$506,888.95	$3.47	$3.45	$.1741	$.1296
MILLING										
Labor		$ 54,178.95			$ 52,209.14					
Supplies		172,446.16			189.610.64					
Power		9,135.08			8,070.18					
Depreciation, Etc.		26,150.26	$261,910.45		24,213.70	$274,103.66	$1.69	$1.86	$.0847	$.0701
ADMINISTRATION										
Labor and Supplies		$177,259.35			$156,766.60					
Depreciation, Etc.		10,454.09	$187,713.44		10,083.22	$166,849.82	$1.21	$1.13	$.0607	$.0426
			$987,804.88			$947,842.43	$6.37	$6.44	$.3195	$.2423
Mine Yearly Concession Expense			15,000.00			15,000.00	.09	.10	.0049	.0038
			$1,002,804.88			$962,842.43	$6.46	$6.54	$.3244	$.2461
Credit for Gold			455,127.27			482,032.59	2.93	3.27	.1472	.1232
Net Cost of Silver			$547,677.61			$480,809.84	$3.53	$3.27	$.1772	$.1229

Honduras Operating Costs

Notwithstanding an increase in development and exploration footage of 6,263 feet over that for the year 1933, mining costs per ton for 1934 were slightly lower. A large ore production from development breakage still remains the chief contributing factor to the maintenance of low mining costs.

Milling costs per ton were the lowest yet obtained in the operation of the Rosario Mine. The record tonnage treated was chiefly responsible for the substantial drop in per ton costs.

Total operating costs show an increase of $39,962.45 for the year. Total operating cost per ton, before crediting the value of the gold produced, shows a decrease of $.08 and is the lowest per ton cost yet achieved on this property.

THE MINE

Ore Reserves

The summary appearing below of the Active Ore Reserves as of January 1, 1935, is based on silver at 50 cents and gold at $35.00 per Troy ounce.

Summary—Active Reserves

	Tons of Ore Plus Waste	Avg. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
Estimated Ore at 13 and 14 cut. ft.	526,100	28.39	.1631	14,933,450	85,800
Broken Ore in Stopes at 21 cu. ft.	45,720	28.43	.1312	1,300,000	6,000
TOTAL ACTIVE RESERVES	571,820	28.39	.1605	16,233,450	91,800

Ore reserves as estimated at the end of 1934 show an increase over the corresponding figures given in the 1933 report of 103,733 tons, representing approximately 1,266,890 ounces of silver and 13,159 ounces of gold. Considering the extraction from the mine during the year of 155,100 tons containing 3,384,096 ounces of silver and 14,393 ounces of gold, the results of exploration and development during 1934, which accounts for this substantial increase in ore reserves, may be regarded as highly satisfactory.

Summary—Inactive Reserves

	Tons of Ore Plus Waste	Avg. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
Estimated Ore at 13 cu. ft.	38,610	13.72	.0489	529,660	1,888

In the Inactive Ore Reserves only such ore bodies have been included as can be made readily accessible in a very short time, should a further increase in metal prices or more favorable operating conditions make those ore bodies sufficiently valuable to mine.

As development progresses on veins which have materially contributed to the ore reserves during 1934, the discovery of additional commercial ore bodies therein can be reasonably expected.

Ore Production

	1934	1933	1932	1931	
By Stoping	98,655	102,471	123,018	118,979	tons
From Development Excavations	56,300	44,880	19,336	12,812	"
Total	154,985	147,351	142,354	131,791	"
Development Feet Driven	31,837	25,574	23,022.5	20,364.5	

The individual vein production for each month during the year 1934 is shown in Annex "D".

Of the total production 36.3% of the tonnage came from development excavations as compared with 30.5% the previous year.

The following table shows the comparison of the daily labor employed in each department:

Average Number of Men Per Day

	1934 Total	1933 Total
Number of days	365	365
Mine	601.97	557.94
Mill	67.82	64.88
Administration	28.70	21.59
Surface and Construction	89.33	64.74
Hotel	5.00	5.00
Laboratory	1.99	1.97
Electrical	36.20	33.51
Mechanical	36.56	31.46
Police, San Juan	31.50	23.18
Police, Rosario	20.00	20.00
Totals	919.07	824.27

Exploration, Development and Mining

The following summary of Annex "C" shows the total footage driven during 1934:

Year	Drifts	Cross-cuts	Raises	Total
1934	13,396.0	9,650.5	8,790.5	31,837 feet
1933	12,620.5	6,100.3	6,853.0	25,574 "

An aggressive development and exploration program resulted in the total footage for 1934 exceeding that of 1933 by 6,263 feet.

No strictly new veins of commercial value were discovered during the year. Valuable branch veins, from main ones undergoing development, were exposed, however, and will probably in time add materially to the main ore resources. Known ore limits were extended both laterally and vertically on many veins still undergoing development.

Operating Cross-cuts and Raises Below the Peña Blanca Level

Jucuara Cross-cuts

The two branch cross-cuts from the Lower 650 main Jucuara Cross-cut, mentioned in last year's report, were completed.

The Southeast branch cross-cut intersected the Jucuara No. 1-Fortuna vein at 165 feet or at a total distance of 530 feet from the main cross-cut. The branch cross-cut was continued past the vein a distance of 135 feet.

The Southwest branch cross-cut entered what is believed to be the Jucuara No. 2 vein 190 feet from the main cross-cut. It was driven 95 feet past the vein.

The ore and waste passes to serve the Jucuara section between the Upper 150 ft. level and the Lower 650 ft. level were completed during the year and are in active service.

The Jucuara No. 1-Fortuna vein is connected to the above ore and waste passes by a cross-cut on the Lower 500 ft. level. All the Jucuara veins are connected by cross-cuts to the ore and waste passes on all other intervening levels between the Peña Blanca or Upper 150 ft. level, and the Lower 650 ft. level.

Jucuara Material Handling Raise

This raise was completed during the year between the Lower 300 ft. and the Peña Blanca levels. Completion of the timber work and the installation of a new double drum electric hoist and cage should be effected in February, 1935. Present costly material handling for the Jucuara section will then be eliminated.

It is planned during the year to connect this raise to the Lower 400 ft. level. The advisability of completing it to the Lower 650 ft. level depends upon the results of further development of the Jucuara ore bodies on and below the Lower 400 ft. level.

Fortuna Cross-cuts

The ore and waste passes referred to above are adequate for transfer needs from the Jucuara veins and the Jucuara end of the Jucuara No. 1-Fortuna. The length of the Jucuara No. 1-Fortuna vein and the amount of ore being developed on the Esperanza end of it and in its various branch stringers indicated the advisability of having additional access from the Mill haulage to those substantial ore bodies. Consequently a new cross-cut was started on the Lower 650 ft. level in Block 67, taking off from the main Esperanza cross-cut in a southwesterly direction. The objective was to extend the Mill haulage to a point directly underneath the Jucuara No. 1-Fortuna vein on the Lower 400 ft. level in the vicinity of the intersection of that vein with the Lower 300 ft. Fortuna cross-cut. The cross-cut was driven a distance of 700 feet during the year and has reached its objective. A small amount of work will yet be required during the month of January to make adequate switching room at the ore pass to be immediately started from the Lower 650 ft. level. This vertical ore pass will connect with a raise driven on the vein from the Lower 300 ft. level to the Upper 350 ft. level. A cross-cut on the Lower 500 ft. level from the Salvador vein has already reached a point vertically over the

proposed ore pass from the Lower 650. A raise will therefore be started in January from the Lower 500 to connect with the already completed ore pass above the Lower 300. At the same time the raise from the Lower 650 to connect at the Lower 500 will be progressing. Before the middle of the year, therefore, it is expected to have an ore pass on the Esperanza end of the Jucuara No. 1-Fortuna vein from the Upper 450 ft. level to the Lower 650, a vertical distance of over 1,100 feet. It is now being extended above the Upper 350 and its upward extension will be limited by the ore horizon in that section.

Lower 650 Santa Fe Cross-cut

The valuable Santa Fe ore bodies lying above the end of this cross-cut, mentioned in last year's report, were during the year made easily accessible to the Mill haulage through the completion of ore and waste passes now in service.

Cutoffs

Approximately 900 feet of cutoff work was done during the year on the Mill haulage level. Three hundred feet of this work was done in order to avoid loose ground which had been requiring excessive maintenance. The remainder was to straighten and improve haulage conditions in general.

During the year it is planned to do very little cross-cutting or cutoff work on the Lower 650 ft. level. The essential work necessary for some time to come has been completed.

Stations

The greater part of the station work on the various levels in the Jucuara section was completed during the year. The elimination of all this work very early in the year 1935 will permit of a substantial increase in exploration work.

Operating Cross-cuts and Raises
Above the Upper 150 Peña Blanca Level

Early in the year the advisability of having a central ore pass in the Jucuara No. 1-Fortuna vein above the Peña Blanca level was noted. In block 78 such an ore pass was started in the hanging wall of the vein. It has been completed to the Upper 350 ft. level and is being continued to the Upper 450 and higher if necessary.

The existence of substantial ore bodies above the Upper 150 ft. level, particularly on the Jucuara No. 1-Fortuna vein, makes it advisable to have a central material handling raise above the Peña Blanca level as well as below. Such a raise has just been started in the footwall of the Jucuara No. 1-Fortuna vein in block 76. It will be driven vertically to at least the Upper 450 ft. level.

Exploration Cross-cuts

Lower 400 Esperanza Cross-cut

The main cross-cut was actively pushed ahead during the year. The total advance was 743.5 feet. The branch cross-cut in a southeasterly direction was advanced but 205 feet.

As an exploration cross-cut the Lower 400 Esperanza has been very disappointing. It is proposed, however, to continue this work throughout 1935. It is anticipated that this cross-cut will soon have passed through loose and heavy ground which it is believed exists for a considerable distance ahead. Once past this extensive fault, which probably forms the Tigra Creek, ground more favorable for the occurrence of veins can be expected.

Lower 300 Jucuara Cross-cut

This cross-cut was driven a distance of 140 feet, but was discontinued to give preference to a branch cross-cut from it in an easterly direction towards the Southwest Vein. A diamond drill hole started from the eastern end of the Jucuara No. 3 vein on the Lower 300 ft. level was run parallel to the Lower 300 Jucuara cross-cut, but 340 feet east of it. The possible existence of an ore body of some importance was indicated by this hole and the branch cross-cut referred to is being run to explore that ore body. It was driven 280 feet during the year and should enter the expected ore body early in February of this year. In case commercial ore is exposed it is proposed, while developing such ore, to continue the main cross-cut or other cross-cuts which the nature of the ore body may indicate advisable.

Driving of the proposed raises from the Lower 650 ft. level in the vicinity of the Southwest and Santa Gertrudis veins as mentioned in last year's report, has been postponed pending the results to be divulged in the very near future by the Lower 300 Jucuara cross-cut. The results of further exploration from this cross-cut will determine during the first part of the present year the best location for ore and waste passes from the Lower 650 to handle the Southwest and Santa Gertrudis ores, and any new bodies which it is hoped will be discovered in their vicinity.

Upper 150 Jucuara-Salvador Cross-cut

Continuation of this cross-cut, mentioned in last year's report, was forced to await completion of urgent station work on the Upper 150 ft. level. Work in the cross-cut was actively renewed in December of the year under review. Plans for 1935 are to push this work continuously in an endeavor to cut the possible western extension of the San Blas and Independencia veins and in general explore this new territory.

Upper 150 West Cross-cut

From the West Cross-cut, which was driven to the surface in the year 1932, a branch cross-cut was started in block 81 in a westerly direction to explore what is considered favorable territory between the Clarke Tunnel and the West Cross-cut. At a distance of 375 feet from the main cross-cut a small oxidized vein bearing spotty gold values was encountered. While the cross-cut was being continued, 200 feet of lateral development was done on the vein. Although the results were not gratifying, further development is warranted.

The cross-cut was driven during the year 584 feet and is now in block 88. It is proposed to continue it during 1935 at least 500 feet.

Veins Worked in 1934

The 16 veins from which came the 1934 ore production are the following:

Salvador; Jucuara No. 1-Fortuna; Independencia; San Benito; Santa Fe Nos. 1, 2 and 3; Jucuara Nos. 2, 3 and 4; Veta No. 4; Capitana; Fortuna-North; San Joaquin; West Cross-cut, and South San Miguel.

Salvador Group

Salvador Vein

The Salvador was again the heaviest single producer. 42,440 tons came from stoping and development excavations in this vein compared with 49,239 tons in 1933. Opportunities for exploration and development on the Salvador are yearly diminishing and consequently but 2,573 feet of development work was done in it during the year. It is fully expected that the Salvador vein will continue to be a relatively heavy producer for the next two years, but at a steadily diminishing rate.

Jucuara No. 1-Fortuna

This vein represents by far the largest individual ore reserve in the mine today. 12,392.5 feet of development was done in it. It produced 31,971 tons of ore of which amount 24,070 tons came from development excavations as against 7,901 tons from stopes. Further development of the upper reaches of this vein still appears inviting. The Upper 450 ft. level is being actively developed from the Jucuara end. There is fair likelihood that commercial ore will be encountered on the Upper 550 ft. level.

Development on the Lower 400 ft. level was carried on from the Jucuara end, but results cannot be considered entirely gratifying. Some commercial ore was encountered but indications are that no great tonnage of minable ore, under present conditions, will be found on this level, whereas the Lower 300 ft. level is nearly all ore bearing.

Stoping operations from this vein during the year 1935 will be considerably increased over those of 1934, but there is reason to expect that additional ore reserves from development throughout the year will more or less offset ore extraction.

Jucuara No. 1-Fortuna vein is one from which many branches and stringers lead out from the main vein. Future development of some of these stringers is being looked forward to with interest.

Fortuna-North

This north extension of the Fortuna vein, which intersects Veta No. 4, being of low grade, remained idle during recent years. Its workings, together with those of Veta No. 4, were reopened during the year. A stope was opened on the Upper 350 ft. level of the Fortuna-North which produced 421 tons. This stope has barely been started, but the vein is well defined, has good walls and carries sufficient value to be today minable at a profit. It is quite probable that this vein will produce close to 2,000 tons during the year.

Independencia Group
Independencia Vein

Exploration and development amounted to only 980 feet during the year. The Independencia produced a total of 23,304 tons of ore, 21,561 tons from stopes and only 1,743 tons from development excavations.

Production from this vein during 1935 should compare favorably with that of 1934. It is, however, to be expected that the ore reserves in it will be steadily decreasing during the next two years, particularly as regards value.

Santa Fe Group
San Benito Vein

Exploration and development during the year amounted to but 929.5 feet. This exploration and development resulted in a considerable increase in the ore reserves on this vein as of January 1, 1935, compared with January 1, 1934. Such increase (see Annex "D") has been affected notwithstanding the production from the San Benito during the year of 6,555 tons.

The San Benito still presents possibilities for future development which may result in a further addition to its reserves.

Production from this vein during 1935 should compare favorably with the 1934 production both as regards tonnage and ounces of gold and silver.

Santa Fe No. 1

Exploration and development in this vein amounted to 241 feet. It produced in 1934, 12,484 tons of fair grade ore. While finishing up the stopes on this vein some additional bodies were discovered in the walls, resulting in a considerable increase in production over the estimated ore reserves at the first of the year.

The reserves remaining in the Santa Fe No. 1 are low grade and are all between the Lower 450 and Lower 500 ft. levels.

It should be here recorded that the Santa Fe No. 1, now almost depleted, was an exceptionally strong vein, but produced no ore above the Zero level. A possible upward extension of this vein should, as opportunity permits, be sought above the Peña Blanca level. It is hoped that such exploration work can be carried on during the year 1935 in conjunction with exploration of the upper reaches of the San Benito. Faults more or less parallel to the strike of these two veins have resulted in a considerable disturbance of the Santa Fe vein between the Zero level and the Upper 150 and of the San Benito vein in the vicinity of the Upper 250 ft. level. The good values of both of these veins, particularly in gold, well warrants their exploration above the disturbed area.

Santa Fe Vein No. 2

This vein, as explained in last year's report, is a branch of the main Santa Fe No. 1 and was during the year 1933 developed into a substantial ore body. Development, continued during the year 1934, resulted in a total footage of 1,875.5 feet. Total production during the year from this vein amounted to 5,969 tons, of which amount development excavations produced 52.3%.

Lateral extremities on this ore body appear to have been fairly well determined. Development is actively progressing on the Lower 500 ft. level and good ore is being exposed. Development on the Lower 650 ft. level will also be prosecuted during the year. This is one of the few veins upon which minable values are encountered at that depth.

The possibility of encountering this vein above the Lower 250 ft. level still exists. Operating conditions during 1934 did not permit of doing the cross-cut work above the Lower 250 ft. level recommended in last year's report.

It is unlikely that the addition of ore reserves to this vein will keep pace with ore extraction during 1935.

Santa Fe Vein No. 3

This vein was first opened up as a branch vein from the Santa Fe Vein No. 2 on the Lower 400 ft. level. Development has shown that it also joins the main Santa Fe Vein No. 1. In other words, its lateral limits are confined within these two veins, distant from

each other approximately 600 feet on the strike of Vein No. 3. The vein has been developed on the Lower 200, Lower 300 and Lower 400 ft. levels, and its development is just commencing on the Lower 500 ft. level. It is rather erratic in structure and width, but values are generally good and it shows a substantial ore reserve.

The Santa Fe Vein No. 3 produced during 1934, 7,718 tons, of which amount 4,365 tons or 56½% came from development excavations.

It is planned to draw heavily on this vein during 1935. Opportunities for future exploration on it, apart from the Lower 500 and 650 ft. levels, are limited. It is not anticipated, therefore, that its ore reserves will show any increase at the end of the present year.

Santa Fe Veins (General)

The various Santa Fe veins form a network from which additional branch veins may extend. The possibility of discovering such new ore bodies among the present network is considered reasonably good. On the other hand, the development of any substantial additional ore bodies similar to that of the Santa Fe No. 2 can hardly be expected.

Jucuara Group

Jucuara No. 2 Vein

Work on Jucuara No. 2 Vein was confined almost entirely to development, aggregating a total of 3,623.5 feet. Its ore output for the year amounted to 9,257 tons of which 9,153 tons came from development excavations.

Development was confined entirely to the Zero, Lower 200 and Lower 300 ft. levels. Such development responded reasonably well as indicated by the substantial increase in ore reserves at the end of 1934.

It is planned during the year to explore this vein aggressively on and above the Peña Blanca level. With that object in view a raise is being run to the Upper 250 ft. level near the junction of the Jucuara No. 2 and Jucuara No. 3 Veins. On the Lower 400 ft. level development will also be pushed.

Encouraging features on this vein terminate in its westerly extension in block 94. Short exploration cross-cuts are being driven from this western extremity which thus far have not resulted favorably. The territory still further west is considered to be favorable for the existence of additional ore bodies and exploration work in that direction will be fairly heavy throughout the year.

Jucuara No. 3 Vein

Production from this vein amounted during the year to 5,239 tons of which amount 86.5% came from development, aggregating 1,748 feet.

Development was confined to the Zero, Lower 200, Lower 300 and Lower 400 ft. levels, and resulted in a substantial addition to the ore reserves.

Jucuara No. 3 Vein carries a high percentage of gold, an approximate ratio of gold to silver of 1:50. The field for future development on this vein appears to be very limited. The chief hope of adding substantially to its present ore reserve lies in the possibility of its continuation upward above the intersection on the dip with the Jucuara No. 2 Vein. Indications of this possibility are at present unfavorable; but further exploration is necessary to decide this point definitely.

Jucuara No. 4 Vein

Development on Jucuara No. 4 Vein amounted to 1,391.5 feet and the vein produced 2,518 tons of ore, 88% of which came from development excavations.

Development was confined to the Zero, Lower 200, Lower 300 and Lower 400 ft. levels. Above the Lower 200 ft. level, development proved disappointing, particularly near its intersection with the Jucuara No. 2 Vein. On the other hand this vein appears stronger on the Zero level than on the lower levels, near its intersection with the Jucuara No. 1-Fortuna Vein. Although the Jucuara No. 4 Vein in places shows some very high grade ore its structure is very erratic. Continuous large stopes in it are bound to be the exception rather than the rule. Although it shows a greater ore reserve than Jucuara No. 3 Vein, mining of it is going to be more difficult.

Ore reserves to be added to those already existing on this vein will probably be chiefly developed on the Lower 400 ft. level near the intersection of this vein with the Jucuara No. 2 vein. The possibility of this vein, near the Jucuara No. 1-Fortuna end, going to the Upper 150 ft. level or higher is considered reasonably good. Both sections will be developed during the year.

Jucuara Veins (General)

Development in the Jucuara Veins during the year, although resulting in a considerable addition to ore reserves, cannot be looked upon as having produced entirely satisfactory returns. Nearly all are fault veins which are in turn traversed by many non-mineralized faults. The result is a complicated system of deposits which have to be traced out carefully by costly development.

The chief hope of adding materially to the ore reserves in this section lies in the possibility of encountering the western extension of at least one or more of these veins in less disturbed territory, into which active exploration is to be carried this year. The Jucuara territory above the Peña Blanca level is also considered to hold good possibilities which will be fully tested during 1935.

Old Mine Group

Capitana

Early in 1934 this vein was, after lying idle for many years, again made accessible for stoping on the Peña Blanca level. It was also made accessible for development on the Lower 300. The result of such work was that the Capitana produced during 1935, 2,081 tons of ore, 1,083 tons from stoping operations and 998 tons from development. Besides this production to the mill there exists a substantial broken reserve in stopes.

The Capitana still presents some opportunity for development on the lower levels and it should produce a larger tonnage in 1935 than it did in 1934.

San Joaquin

Early in the year the possibilities of this vein, with the improved metal prices, became apparent. The San Joaquin is an old vein of good gold content and its location permitted of relatively cheap recovery from the Lower 650 ft. level. The recovery work progressed steadily and was nearly completed by the end of the year. The lower reaches of the vein are now practically ready for stoping and for development. While active mining is progressing on this vein from the Lower 650 ft. level it is planned during 1935 to recover, if possible, the Lower 300 ft. level, thus making more accessible the present ore reserves.

The San Joaquin produced during the year 350 tons of ore, all of which came from old fills. It is expected that this vein during 1935 will produce over 2,000 tons of ore.

South San Miguel Stringer

The production from this vein of 1,292 tons came entirely from stoping operations.

No development was done on this vein during the year, but it is hoped that operating conditions during 1935 will permit developing the 200 feet on this vein remaining between the Esperanza Cross-cut and the present face on the Peña Blanca level. No stoping operations are contemplated during the year 1935.

Colonia

Considerable work was done during the year to make this vein again available for production. Preparatory work is now practically completed, and a steady though not large production can be expected from the Colonia throughout the year 1935. Opportunities for further development still exist.

Veta No. 4

The workings of this vein were again made accessible early in the year, with the result that it produced 3,322 tons of ore, 2,797 tons of which came from stoping operations.

For the present the ore developed is being left as of too low grade to be mined profitably. Development is, however, being prosecuted on the Upper 350 ft. level toward the east and south. This work was started late in the year, but indications are that new commercial ore bodies on this vein will be disclosed.

Porvenir

The very limited workings on this vein were recovered during the year and development on the Upper 350 ft. level will be started early in the year. The vein on the Peña Blanca level and the Upper 250 ft. level proved to be low grade. There is, however, reason to believe that this vein, above present workings, may develop into better ore. It is planned to do a fair amount of development on it during 1935.

Veins Not Worked During 1934

Veins not worked during 1934 and which have been included in the Inactive Ore Reserves are the Esperanza, which is an extension of the South San Miguel; the Nueva; the Southwest; and the Carmen. It is hoped during the year to investigate these more fully by further development or by recovering workings wherever a possibility exists of gaining access to possible minable ore bodies.

The Santa Gertrudis Vein will probably be further developed below the Peña Blanca level in conjunction with the Southwest Vein, either from an extension of the Lower 300 Jucuara Cross-cut or by means of raises from the Lower 650 ft. level.

Many other veins in the old part of the mine have, according to records, small pillars of fair ore remaining. The possibility, however, of making these bodies accessible within the next few years is extremely remote and such possible ore reserves have, for the time being, been excluded from either Active or Inactive Reserves.

Diamond Drilling

4,325 feet of diamond drilling was done during 1934, compared to 4,110 feet in 1933, at a cost per foot of $3.80 compared to $3.91 for 1933.

The existence of no large ore bodies was indicated by the year's drilling. In view of the fact that it will be possible during 1935 to carry on a much more aggressive cross-cutting exploration program than in 1934 it has been decided to discontinue diamond drilling very early in the year 1935.

New Mine Equipment and Mine Maintenance

During the year a new 8-ton locomotive was purchased for the mill haulage level.

A new double drum electric hoist, purchased for the Jucuara material handling raise, will be installed on the Upper 150 ft. level in January, 1935.

For the mill level haulage it was decided during the year to purchase 35 new cars of 67.5 cubic feet capacity to replace the 25 cubic foot cars now in use. These cars have been received but have not yet been assembled. The cars which they will replace will be transferred to the Peña Blanca level. Their use there should eliminate the necessity of new cars or car parts for that level for a long time.

By the use of these larger capacity cars for the mill haulage level it is hoped to be able to eliminate one of the two shifts now required for ore delivery to the mill. It is also expected that a material decrease in car maintenance will be the result of using larger and fewer cars.

During the year the mill haulage level was re-tracked with new 50 lb. per yard rail instead of the old 35-lb. rail, from the portal to block 45. This stretch of 4,560 feet passes through a very old tunnel of varying grades and many turns. The old ties were also replaced throughout and the track re-ballasted. It is expected that this section of the haulage level which has in the past given trouble will require but little maintenance for several years.

During the year 3,550 feet of 10″ standard compressed air pipe was installed from the compressor house through the Porvenir Adit to the Esperanza Cross-cut. This pipe line replaces the old 9⅝″ line which had, except for a few recent replacements, entirely deteriorated. Installation of this new air line through the Porvenir Adit greatly reduces the distance which air has to travel to the principal workings. The result has been an appreciable increase in air pressure at the working faces.

Track and pipe repairs were carried on aggressively throughout the year and the general condition of such equipment can today be considered exceptionally good.

THE MILL

Tonnage Crushed

	1934	1933
Total wet tons received	168,959.73	161,145.58
Average per cent moisture	8.2710	8.5602
Total dry tons milled	155,100	147,100
Average tons per day milled (365 days)	425	403
Average tons per day milled, full running time	454	447
Average tons per day milled, per 1850 lbs. stamp	22.7	22.4
Number of 1850 lbs. stamps	20	20
Total tons treated by mill, to Dec. 31, 1934	2,497,608	2,342,508

Recovery

	1934	1933
Average ounces silver received per ton	21.819	29.077
Total ounces silver received	3,384,096	4,277,197
Average ounces silver recovered per ton	19.996	26.636
Total ounces silver recovered	3,101,357	3,918,091
Average silver recovered, per cent	91.645	91.604
Average ounces gold received per ton	.0928	.1241
Total ounces gold received	14,393	18,255
Total ounces gold recovered per ton	.0839	.1168
Total ounces gold recovered	13,019	17,183
Average gold recovery, per cent	90.409	94.118

Supplies Used

	1934 Per ton of ore crushed	1933 Per ton of ore crushed	1934 Per oz. fine bullion produced Grade of ore	1933 Per oz. fine bullion produced Grade of ore
	155,100 Tonnage	147,100	Ag. 21.819 Au. .0928	Ag. 29.077 Au. .1241
Cyanide (100% KCN)	3.767680 lbs.	5.007191 lbs.	.187628	.187169
Steel Balls	.045132 "	.....	.002248	.....
Zinc Dust	.689452 "	.863385 "	.034336	.032273
Muriatic Acid	.076370 "	.063766 "	.003803	.002384
Lime	17.730070 "	17.202753 "	.882980	.643037
Borax Glass	.023533 "	.026513 "	.001172	.000991
Soda	.002128 "	.005235 "	.000106	.000196
Fuel Oil	.033482 gals.	.044935 gals.	.001667	.001680
Tube Mill Rock	65.400380 lbs.	65.390890 lbs.	3.257024	2.444303
Sulphur	2.055609 "	2.316111 "	.102372	.086576

Treatment Period Detail

	1934 Hrs.	Min.	Ag. %	Au. %	1933 Hrs.	Min.	Ag. %	Au. %
Extraction by Crushing Solution	9	00	39.39	73.17	9	00	37.78	76.23
Extraction by Agitation	82	56	52.66	16.92	83	14	54.09	18.05
Extraction in Slime Presses	1	05	.38	1.07	1	05	.28	.56
	92	61	92.43	91.16	93	19	92.15	94.84
Less Dissolved Value Loss			.78	.75			.55	.73
Recovery			91.65	90.41			91.60	94.11
Per Cent Sand Not Passing 150 Mesh			28.968				24.478	

Tonnage Milled

The record tonnage milled in 1934 mentioned elsewhere in this report is accounted for principally by favorable power conditions, necessitating but small curtailment of milling operations during the dry season.

New Mill Equipment

It became necessary during the year to replace a small Hardinge ball mill, in use for 19 years, by a new mill. In order to obtain steadier operating conditions and finer grinding it was decided to install a mill of decidedly larger capacity than the old one. Consequently, a 6 ft. x 5 ft. Allis Chalmers ball mill was installed to take the over-size from vibrating screens placed below the battery discharge and also to take mine-run ore in addition to that being crushed by the stamps.

Much of the low grade ore being mined on the Salvador and Independencia veins is colloidal and hard to settle. Inasmuch as a considerable quantity of such ore still exists and the mill settling capacity has always been too limited to take care of such conditions or slight tonnage increases, it was decided to install an additional Dorr Thickener. This will be erected early in the year 1935.

In order properly to balance the mill for a tonnage of between 450 and 475 tons per day, the need of additional slime filtering capacity has for some time been apparent. It is expected to purchase and install such equipment during 1935.

POWER

Rainfall	1934	1933
Total rainfall, inches	53.87	55.02
Number of rainy days	185	190
Greatest monthly rainfall	12.74 (May)	11.31 (Oct.)
Lowest monthly rainfall	.55 (March)	.38 (Feb.)
Greatest single rainfall	2.19 (Oct.)	2.43 (Oct.)

POWER DISTRIBUTION

	1934		1933	
	Kilowatt Hours	K.W. Hours Per Ton	Kilowatt Hours	K.W. Hours Per Ton
Ventilation	14,715	.095	7,970	.054
Mine Power	2,637,739	17.007	2,538.930	17.260
Electric Haulage	209,640	1.352	176,600	1.201
Blacksmithing	37,400	.241	33,100	.225
Mine Lights	27,250	.176	20,800	.141
Hoisting	26,106	.168	26,700	.182
Mill Power	5,803,893	37.420	5,392,215	36.657
Mill Lights	47,300	.305	37,830	.257
Surface Lights	530,423	3.420	590,100	4.012
Surface Power	155,927	1.005	111,400	.757
Machine Shop	131,620	.849	117,600	.799
Laboratory	20,817	.134	18,095	.123
Totals	9,642,830	62.172	9,071,340	61.668
Power Production by:				
San Juancito Plant		51.80%		54.52%
Guadalupe Plant		32.13%		32.24%
Aguacatal Plant		16.07%		13.24%
		100.00%		100.00%

COST OF POWER PRODUCTION

	1934			1933		
	Amount U. S. Cy.	Per Ton	K.W. Hour	Amount U. S. Cy.	Per Ton	K.W. Hour
Labor	$10,858.64	.07001	.0011261	$11,051.01	.07513	.0012182
Supplies	4,195.59	.02705	.0004351	3,220.03	.02189	.0003550
Total	$15,054.23	.09706	.0015612	$14,271.04	.09702	.0015732

Based on Horsepower Generated:

	1934	1933
Horsepower hours	12,926,045	12,159,973
Cost per horsepower hour	$ 0.001165	$ 0.001174
Cost per horsepower year	$10.20540	$10.28424
Cost per horsepower year, decrease	$ .07884	

Power Output

The record tonnage mined and milled for the year called for increased power output amounting to 9,642,830 K.W. Hours, compared to 9,071,340 for the year 1933. Fortunately the yearly rainfall and the efficient operation of the three power plants made it possible to meet these requirements.

OTHER DEPARTMENTS

Medical Department

	1934	1933
Cost of maintenance	$ 9,943.40	$ 7,035.22
Total consultations, examinations and treatments	14,690	13,339

Assay Office and Laboratory

	1934	1933
Total number assays run	31,503	29,052
Average number of assays per day	86	80
Total cost	$ 6,912.93	$ 6,573.50
Cost per assay	.22	.23

Schools

	1934	1933
Average daily attendance during year:		
Boys' School	127	132
Girls' School	121	121
Rosario Mixed School	61	52
La Reforma Mixed School	27	27
Rosario Foreign School	8	8
Total expense—native schools	$ 9,616.52	$7,379.77
Total expense—Rosario foreign school	3,196.92	2,235.65
Total expense—native and foreign schools	$12,813.44	$9,615.42
Increase	3,198.02	

As stated in last year's report the cost of maintenance of the schools during the year 1933 was sub normal, due to a rearrangement of the school year. The maintenance cost for 1934 of $12,813.00 compares favorably with that of the year 1932, both years representing a full school year.

The slight increase in school maintenance over that of 1932 is accounted for by the installation of a new mixed school in a fairly populous settlement near San Juancito.

Police and Garrison

	1934	1933
Total maintenance expense	$16,261.60	$15,657.22
Increase	604.38	

Hotel

	1934	1933
Total number of meals served	31,345	30,142
Total cost	$16,485.40	$16,084.41
Cost per meal	.526	.534

Roads

	1934	1933
Total maintenance	$8,825.20	$9,513.96
Decrease	688.76	

Expenditures for road maintenance during 1934 can be considered as more or less normal. It is not expected that the year 1935 will require expenditures greater than those in the year under review.

Agencies

	1934	1933
Total expense	$3,715.54	$3,709.27
Increase	6.27	

EXPANSION

Seven prospects in Honduras were investigated by actual exploration during 1934. Three of these have already been abandoned as offering no further incentive. Work on the other four will be continued until something more definite as to their possibilities is determined.

CONCLUSION

In conclusion it may be here recorded that the year under review closes with the largest ore reserves recorded in the history of the Company and with your plant in excellent condition to maintain steady and continued production. For the attainment of that condition all Department Heads and their assistants are deserving of commendation and of your continued confidence.

The hearty cooperation, help and advice of the Officers and Board of Directors merits special mention in this report as an invaluable asset and an incentive to still greater efforts on the part of the entire staff.

Respectfully submitted,

K. H. MATHESON,

General Manager.

Annex "A"

Active Ore Reserves

ESTIMATED RESERVES (13 and 14 cu. ft. per ton) Veins	Av. width, feet Vein	Waste	Stoping	Tons of ore plus waste	Av. Troy ounces per ton Ag.	Au.	Total Troy ounces Ag.	Au.
Independencia Group								
Independencia	2.24	2.27	4.51	32,000	24.	.08	768,000	2,560
San Blas....	.93	2.07	3.00	2,900	18.	.03	52,200	87
Salvador Group								
Salvador	2.28	2.33	4.61	55,500	23.	.10	1,276,500	5,550
Jucuara No. 1 —Fortuna	2.73	1.51	4.24	186,000	33.	.07	6,138,000	13,020
Fortuna North	1.87	1.13	3.00	2,750	21.	.03	57,750	82
Jucuara Group								
Vein No. 2...	3.30	2.68	5.98	76,000	31.	.28	2,356,000	21,280
Vein No. 3...	1.91	2.03	3.94	27,600	17.	.36	469,200	9,936
Vein No. 4...	2.87	1.53	4.40	28,500	34.	.13	969,000	3,705
Santa Fe Group								
Santa Fe								
Vein No. 1.	2.60	2.40	5.00	2,650	18.	.09	47,700	238
Vein No. 2.	2.76	2.57	5.33	43,500	34.	.34	1,479,000	14,790
Vein No. 3.	1.83	2.57	4.40	27,000	26.	.26	702,000	7,020
San Benito ..	1.26	2.29	3.55	11,400	19.	.20	216,600	2,280
Old Mine Group								
San Joaquin .	1.11	1.89	3.00	9,100	11.	.25	100,100	2,275
Colonia	1.01	1.99	3.00	7,900	16.	.15	126,400	1,185
Capitana	.69	2.31	3.00	7,000	7.	.22	49,000	1,540
Other Veins								
Santa Gertrudis .	.94	2.06	3.00	6,300	20.	.04	126,000	252
				526,100	28.39	.1631	14,933,450	85,800

BROKEN ORE IN STOPES (21 cu. ft. per ton) Veins	
Independencia	4,816
Salvador	28,826
Jucuara No. 1—Fortuna	3,423
Santa Fe No. 1	5,346
Capitana	1,124
Mine Storage Chutes	1,625
Mill Bin	560
	45,720

Summary—Active Reserves

Estimated Ore at 13 and 14 cu. ft.	526,100	28.39	.1631	14,933,450	85,800
Broken Ore in Stopes at 21 cu. ft.	45,720	28.43	.1312	1,300,000	6,000
TOTAL ACTIVE RESERVES AS OF JANUARY 1, 1935	571,820	28.39	.1605	16,233,450	91,800

Annex "B"

Inactive Ore Reserves

ESTIMATED RESERVES
(13 cu. ft. per ton)
Veins

	Tons of ore plus waste	Ounces per ton Ag.	Au.	Total ounces Ag.	Au.
Esperanza (South San Miguel Extension South)	5,450	14.	.04	76,300	218
Porvenir	1,210	11.	.03	13,310	36
Nueva	8,450	9.	.11	76,050	929
Southwest	10,500	16.	.03	168,000	315
Veta No. 4	3,000	12.	.03	36,000	90
Carmen	10,000	16.	.03	160,000	300
TOTAL INACTIVE RESERVES AS OF JAN. 1, 1935	38,610	13.72	.0489	529,660	1,888

Annex "C"

Exploration and Development for the Year 1934

Veins and Groups	Drifts	Cross-cuts	Raises	Total Feet
Independencia Group				
Independencia	494.0	209.0	277.0	980.0
Salvador Group				
Salvador	1,129.5	223.0	1,220.5	2,573.0
Jucuara No. 1—Fortuna	5,634.0	3,190.0	3,568.5	12,392.5
Jucuara Group				
Jucuara No. 2	1,568.5	1,322.0	732.5	3,623.0
Jucuara No. 3	928.0	195.0	625.0	1,748.0
Jucuara No. 4	985.5	63.0	343.0	1,391.5
Santa Fe Group				
Sante Fe No. 1	96.0	44.0	101.0	241.0
Santa Fe No. 2	651.0	353.5	871.0	1,875.5
Sante Fe No. 3	1,042.5	44.0	368.5	1,455.0
San Benito	526.0	132.0	271.5	929.5
Esperanza Cross-cuts				
Lower 400	.....	956.0	.....	956.0
Lower 650	.....	87.0	.....	87.0
Station Cross-cuts				
Upper 150	.....	751.0	.....	751.0
Zero	.....	218.0	.....	218.0
Lower 200	.....	73.5	.....	73.5
Lower 300	.....	162.0	.....	162.0
Lower 400	.....	92.0	.....	92.0
Lower 500	.....	11.0	.....	11.0
Shaft Raises				
Lower 200	.....	.....	100.0	100.0
Other Cross-cuts				
L.650 Cut-offs	.....	927.0	.....	927.0
West Cross-cut L.150	213.0	597.5	.....	810.5
Capitana	.....	.....	300.0	300.0
Veta No. 4	128.0	.....	12.0	140.0
TOTALS	13,396.0	9,650.5	8,790.5	31,837.0

ORE PRODUCTION

Annex "D"

From Stoping Operations:

Veins	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Independencia Group													
Independencia	1,821	1,332	1,758	1,633	1,249	2,024	1,645	1,643	1,719	2,054	2,128	2,555	21,561
Salvador Group													
Salvador	3,883	4,030	4,220	2,737	2,574	3,362	3,348	2,754	2,742	3,343	2,785	3,156	38,934
Jucuara No. 1—Fortuna	507	1,052	704	665	613	770	996	899	619	423	283	370	7,901
Fortuna North	.....	.....	.....	.....	50	24	21	326	.....	.....	.....	.....	421
Jucuara Group													
Jucuara No. 2	.....	.....	.....	.....	94	7	3	.....	.....	.....	.....	.....	104
Jucuara No. 3	.....	.....	.....	.....	.....	2	141	2	276	35	147	108	711
Jucuara No. 4	.....	.....	.....	.....	.....	.....	90	107	82	23	.....	.....	302
Santa Fe Group													
Santa Fe No. 1	2,100	1,457	1,495	1,342	896	981	432	586	743	807	550	566	11,955
Santa Fe No. 2	.....	.....	.....	.....	70	175	682	270	474	567	588	17	2,843
Santa Fe No. 3	.....	.....	.....	.....	265	546	278	499	584	476	403	302	3,353
San Benito	433	237	226	391	332	504	398	831	599	692	340	65	5,048
Old Mine Group													
Capitana	.....	.....	.....	18	219	179	62	141	115	172	100	77	1,083
San Joaquin	.....	.....	.....	.....	.....	.....	.....	276	38	.....	20	16	350
South San Miguel Strg.	868	266	44	114	.....	.....	.....	.....	.....	.....	.....	.....	1,292
Miscellaneous Group													
Veta No. 4	63	333	531	694	201	282	353	44	63	.....	128	105	2,797
STOPING TOTALS	9,675	8,707	8,978	7,594	6,563	8,856	8,449	8,378	8,054	8,592	7,472	7,337	98,655

From Development Excavations:

Veins	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Independencia Group													
Independencia	153	348	280	137	316	166	147	168	28	.....	.....	.....	1,743
Salvador Group													
Salvador	470	358	234	376	415	412	180	352	358	56	148	147	3,506
Jucuara No. 1—Fortuna	1,970	1,652	1,865	1,814	2,400	1,874	1,770	2,170	1,743	2,608	2,323	1,881	24,070
Jucuara Group													
Jucuara No. 2	714	791	1,007	1,107	982	949	844	824	439	215	649	632	9,153
Jucuara No. 3	308	250	217	348	372	117	449	367	499	538	508	555	4,528
Jucuara No. 4	11	4	.....	12	127	189	286	174	203	337	323	550	2,216
Santa Fe Group													
Santa Fe No. 1	86	12	28	.....	.....	.....	.....	.....	.....	.....	128	275	529
Santa Fe No. 2	525	373	521	214	222	271	195	5	27	198	309	266	3,126
Santa Fe No. 3	92	80	265	390	370	352	660	595	340	417	299	505	4,365
San Benito	.....	303	211	241	142	13	43	.....	50	.....	39	465	1,507
Old Mine Group													
Capitana	.....	.....	.....	.....	.....	20	106	108	195	162	186	221	998
Miscellaneous Group													
Veta No. 4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	292	233	525
West Cross-cut	.....	.....	.....	.....	.....	.....	.....	60	4	.....	.....	.....	64
DEVELOPMENT TOTALS	4,329	4,171	4,628	4,639	5,346	4,363	4,680	4,823	3,886	4,531	5,204	5,730	56,330
STOPING TOTALS	9,675	8,707	8,978	7,594	6,563	8,856	8,449	8,378	8,054	8,592	7,472	7,337	98,655
GRAND TOTALS	14,004	12,878	13,606	12,233	11,909	13,219	13,129	13,201	11,940	13,123	12,676	13,067	154,985

Annex "E"
TONNAGE MINED
From October 1, 1907, to January 1, 1935

Veins	Total including Stoping, Devel. & Filling Oct. 1, 1907, to Dec. 31, 1933	Total including Stoping, Devel. and Filling Year 1934	Grand total including Stoping, Devel. and Filling Jan. 1, 1935
Buena Ventura	98,490	.....	98,490
Candelaria Group	166,573	.....	166,573
Capitana	54,268	2,081	56,349
Carmen	18,365	.....	18,365
Catalina	6,587	.....	6,587
Colonia	56,438	.....	56,438
Concepcion	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	106,245	.....	106,245
Esperanza	8,710	.....	8,710
Fortuna Group	84,454	421	84,875
Guadalupe	61,177	.....	61,177
Independencia	212,372	23,304	235,676
Jucuara No. 1—Fortuna	18,896	31,971	50,867
Jucuara No. 2	20,098	9,257	29,355
Jucuara No. 3	.....	5,239	5,239
Jucuara No. 4	.....	2,518	2,518
North	4,647	.....	4,647
Northwest	89,320	.....	89,320
Nueva	28,147	.....	28,147
Porvenir	1,711	.....	1,711
Rosario	150,915	.....	150,915
Salvador	442,799	42,440	485,239
San Benito	68,535	6,555	75,090
San Blas	5,052	.....	5,052
San Joaquin	63,030	350	63,380
San Luis	2,389	.....	2,389
San Miguel North	174,801	.....	174,801
San Miguel Group	124,550	1,292	125,842
Santa Fe No. 1	169,814	12,484	182,298
Santa Fe No. 2	.....	5,969	5,969
Santa Fe No. 3	.....	7,718	7,718
Santa Gertrudis	30,789	.....	30,789
Socorro	22,592	.....	22,592
Southwest	20,509	.....	20,509
Termópilas	1,094	.....	1,094
West	97,005	.....	97,005
Veta No. 4	5,001	3,322	8,323
Ore from Development	63,599	.....	63,599
Miscellaneous	3,315	64	3,379
TOTALS	2,508,867	154,985	2,663,852

Summary
From October 1, 1907, to January 1, 1935

From Stoping	2,073,887
From Development	356,565
From Fills	233,400
TOTAL	2,663,852

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NEW YORK and HONDURAS ROSARIO MINING COMPANY



FIFTY-FIFTH ANNUAL REPORT

NINETEEN HUNDRED AND THIRTY-FIVE

REPORT of the
NEW YORK and HONDURAS
ROSARIO MINING COMPANY

NEW YORK

January 1, 1936

OFFICERS

WM. A. PRENDERGAST, *President*

H. A. GUESS, *Vice-President*

W. C. LANGLEY, *Treasurer*

J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

LEWIS L. CLARKE, *Chairman*

H. A. GUESS

IRVING HEIDELL

DR. J. RALPH JACOBY

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LESTER S. OPPENHEIMER

WM. A. PRENDERGAST

M. F. SOTO

AMBROSE G. TODD

RICHARD H. VALENTINE

EXECUTIVE COMMITTEE

LEWIS L. CLARKE, *Chairman*

H. A. GUESS

IRVING HEIDELL

DR. J. RALPH JACOBY

M. F. SOTO

AMBROSE G. TODD

WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

PRESIDENT'S REPORT

February 20th, 1936.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company:

The Fifty-fifth Annual Report of your Company, covering the year 1935, is herewith submitted.

At the beginning of the years 1934 and 1935, you were advised, that in view of the then favorable prices for silver and gold, lower grade ores would be utilized, thus prolonging the life of your property. It is fortunate that it was possible to follow this policy, as it resulted in a saving, during the two years mentioned, of 1,875,-836 58/100 ounces of silver, and 7,995 675/1000 ounces of gold, compared with the two preceding years of 1932 and 1933. At the same time, there has been distributed, during the years 1934 and 1935, the largest dividends in the Company's history, $4.00 and $4.25 per share respectively, these dividends representing 96 41/100% of the Company's Net Earnings during this period. During the years 1929 and 1935, inclusive, dividends distributed have been 92 76/100% of the Net Earnings.

In the month of December, 1935, there occurred a sudden and drastic reduction in the price of silver. There is no present means for determining to what extent this reduction may go. We can only hope for either an advance, or a stabilization of price, at a figure which will permit the payment of reasonable dividends. In this situation, your Company must be guided by those principles of action which will tend to preserve your property, while at the same time serving the interests of its Stockholders to the greatest possible advantage.

Silver production during 1935 was:
2,641,345 50/100 ounces compared with
3,091,521 56/100 ounces for 1934, a decrease of
450,176 06/100 ounces, which decrease is accounted for by our observance of the policy already referred to.

Gold production for 1935 was:
12,273 554/1000 ounces, compared with
12,995 682/1000 ounces for 1934, a decrease of
722 128/1000 ounces.

The average cost per ounce for producing silver in 1935 was $.30302, compared with $.22670 in 1934, an increase of $.07632.

The average price obtained in 1935 for silver was $.63590, compared with $.48856 in 1934, an increase of $.14734.

The average price obtained for our gold production in 1935 was $35.0083 an ounce, compared with $35.0214 in 1934, a decrease of $.0131.

Our operating expenses in 1935 were $1,079,671.37, compared with $1,002,804.88 in 1934, an increase of $76,866.49.

The New York Administration and General Expenses in 1935 were $75,006.78, compared with $70,659.99 in 1934, an increase of $4,346.79.

The net profit for 1935 carried to Surplus was $850,377.56, compared with $761,459.76 for 1934, an increase of $88,917.80.

We have paid from the earnings of the year 1935, dividends of $800,559.75, or at a rate of $4.25 a share, the largest annual dividends paid by this Company since its organization.

The earnings per share in 1935 were $4.51447, compared with $4.04 in 1934.

Our Income from Investments, and other sundry items, in 1935 was $136,569.64, compared with $94,928.88 in 1934, an increase of $41,640.76.

Our Gross Income (Operations and Investments, etc.) was $1,015,809.19, of which Operations contributed 86.556% and Investments 13.444%.

There is submitted with this report and made a part hereof

1. A Comparative Statement of Operations for the years 1935 and 1934;

2. A comparative Income and Profit and Loss Statement for the years ended December 31, 1935, and December 31, 1934;

3. A Balance Sheet for the year ended December 31, 1935;

4. A statement of the Surplus Account for the year ended December 31, 1935;

5. A list of the Securities held by this Company December 31, 1935.

6. A Table showing Bullion Production and Dividend Distribution to Stockholders from the organization of the Company, including all the dividends paid from the earnings of the year 1935 .

A comparison of the Surplus at the end of 1935, with that of 1934, shows an increase of $385,511.70. This is due to these causes: (1) Net additions to surplus after deduction of dividends paid, and adjustments in surplus accounts of $47,110.12; and (2) A recovery in the market value of the securities owned by the Company of $338.401.58.

On March 11th, 1935, subsequent to the publication of the Fifty-fourth Annual Report, there took place the death of Doctor Julius J. Valentine, a Director of this Company. Doctor Valentine had served as a Director for thirteen (13) years. His services were of a high order, and he was a devoted friend of this Company. *REQUIESCAT IN PACE.*

We are grateful to the Government and people of Honduras for the pleasant and helpful relations that continue to exist between them and us, and we extend to them our cordial felicitations.

Respectfully submitted,

WM. A. PRENDERGAST,
President.

Comparative Statement of Operations For the Years 1935 and 1934

For the purpose of comparison, we show as follows, details pertaining to mine production and operation during the past two years.

	Year 1935	Year 1934	Increase *Decrease
Total Sales Value of Gold and Silver Recovered	$2,109,313.47	$1,965,520.68	$143,792.79
Tons of Ore Milled	156,800.	155,100.	1,700.
Ounces of Silver Recovered	2,641,345.50	3,091,521.56	*450,176.06
Number of Ounces of Silver Recovered per Ton of Ore	16.84532	19.93244	*3.08712
Ounces of Gold Recovered	12,273.554	12,995.682	*722.128
Number of Ounces of Gold Recovered per Ton of Ore	.07828	.08378	*.00550
Sales Value of Silver Recovered	$1,679,637.45	$1,510,393.41	$169,244.04
Average Sales Value of Silver per Ounce	$ .63590	$ .48856	$ .14734
Average Cost of Silver per Ounce	$ .30302	$ .22670	$ .07632
Average Profit on Silver per Ounce	$ .33288	$ .26186	$ .07102
Total Sales Value of Gold Recovered	$ 429,676.02	$ 455,127.67	$*25,451.65
Average Sales Value of Gold per Ounce	$ 35.0083	$ 35.0214	$ *.0131
Value of Silver Recovered per Ton of Ore	$ 10.7120	$ 9.7382	$ .9738
Average Cost of Silver per Ton of Ore	$ 5.1046	$ 4.5188	$ .5858
Average Profit on Silver Recovered per Ton of Ore	$ 5.6074	$ 5.2194	$ .3880
Value of Gold Recovered per Ton of Ore	$ 2.7403	$ 2.9344	$ *.1941
Number of Bars of Bullion Shipped from Mine	1,616.	1,861	*245.

Income and Profit and Loss Statement
For the Years Ended Dec. 31, 1935 and Dec. 31, 1934

	Year 1935	Year 1934	Increase * Decrease
Production of Gold and Silver	$2,109,313.47	$1,965,520.68	$143,792.79
Less: Freight and Expenses on Bullion	75,395.77	82,524.76	*7,128.99
Operating Income	2,033,917.70	1,882,995.92	150,921.78
Deduct: Operating Expenses	1,079,671.37	1,002,804.88	76,866.49
Operating Profit	954,246.33	880,191.04	74,055.29
Deduct: New York Administrative and General Expenses	75,006.78	70,659.99	4,346.79
Net Profit from Operations	879,239.55	809,531.05	69,708.50
Add: Income from Investments, etc.	136,569.64	94,928.88	41,640.76
Totals	1,059,809.19	904,459.93	111,349.26
Less: Other Deductions from Income [Note A]	78,414.70	63,302.66	15,112.04
Net Profit Before Federal Income Tax and Provision for Depletion	937,394.49	841,157.27	96,237.22
Deduct: Federal Income Tax	77,528.91	74,657.08	2,871.83
Net Profit for Year	859,865.58	766,500.19	93,365.39
Appropriated for Depletion from Earnings [Note B]	9,488.02	5,040.43	4,447.59
Profit for Year Carried to Surplus	$ 850,377.56	$ 761,459.76	$ 88,917.80

Note "A": Other deductions from Income include:			
Expansion Expenses	$ 54,295.56	$ 17,201.43	$ 37,094.13
Obsolete Materials and Supplies	.....	866.50	*866.50
Federal Capital Stock Tax and New York State Franchise Tax	8,604.11	7,241.82	1,362.29
Loss on Securities Sold—net	7,284.94	36,599.80	*29,314.86
Amortization of Premium Paid on United States Securities	1,025.58	.....	1,025.58
Legal Expenses	5,035.81	.....	5,035.81
Sundry Items	2,168.70	1,393.11	775.59
	$ 78,414.70	$ 63,302.66	$ 15,112.04

NOTE "B": Beginning with the year 1932, depletion has been taken in tax returns on a percentage basis in accordance with the Revenue Act of 1932. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Depletion deductions on ore mined from the newer discoveries are made for income tax purposes only.

BALANC

AS OF DEC

ASSETS

Permanent—			
Mines, Real Estate and Concessions	$3,000,000.00		
Less: Allowance for Depletion of Mines	2,174,781.83	$ 825,218.17	
Buildings, Machinery and Equipment	1,970,351.60		
Less: Allowance for Depreciation	1,479,276.16	491,075.44	$1,316,293.61
Current—			
Cash		282,618.49	
Bullion at Smelters and in Transit—Less: Allowance for Expenses		322,719.23	
Broken Ore in Stopes and Mill Bins (at cost)		196,393.82	
Inventories—Materials and Supplies (at cost)		220,359.88	
U. S. Government and Other Marketable Securities (at cost, Less Amortization of Net Premium Paid on Government Securities)	$2,096,557.60		
Less: Provision to Adjust to Market Values	276,361.04		
	1,820,196.56		
Accrued Interest	9,598.26	1,829,794.82	2,851,886.24
Other Assets—			
Sundry Accounts Receivable		692.56	
Loans and Advances—Government of Honduras and Municipalities		27,604.27	28,296.83
Deferred Charges—			
Supplies, Prepaid Expenses, Unexpired Insurance Premiums, etc.			176,430.80
			$4,372,907.48

E SHEET

MBER 31, 1935

LIABILITIES

Current—				
Accounts Payable			90,461.23	
Drafts Payable			$ 30,751.88	
Federal Taxes—1935			84,528.91	$ 205,742.02
Reserve for Dividends (Payable January, 1936)				141,275.25
Capital—				
Capital Stock (Par $10.00 per share)				
Authorized and Issued—				
200,000 Shares		$2,000,000.00		
Less: In Treasury—				
11,663 Shares		116,330.00		
Oustanding ..... 188,367 Shares			1,883,670.00	
Surplus—				
Earned		1,578,328.25		
Appreciation of				
Mines	$1,500,000.00			
Less: Depletion				
Earned	936,108.04	563,891.96	2,142,220.21	4,025,890.21
				$4,372,907.48

NOTE:—After adjustment of securities to market value.

Surplus Account
For the Year Ended December 31, 1935

Surplus—December 31, 1934—Per Former Report		$1,756,708.51
ADDITIONS		
Net earnings for the year after provision for Federal Taxes, per Statement of Income and Expenses	$850,377.56	
Reduction of provision to adjust book value of marketable securities to market value at December 31, 1935	338,401.58	
Adjustment of depreciation allowances of prior years to conform to revised basis prescribed by U. S. Bureau of Internal Revenue	9,671.81	1,198,450.95
		2,955,159.46
DEDUCTIONS		
Dividends Paid and Provided for:		
April, 1935—$.75 per share	$141,275.25	
July, 1935—$.75 per share	141,275.25	
October, 1935—$1.00 per share	188,367.00	
December, 1935—$1.00 per share	188,367.00	
Payable January, 1936—$.75 per share	141,275.25	800,559.75
Allowance for depletion on appreciation of mine valuation		9,488.02
Additional Federal Income Tax for the year 1932		2,891.48
		812,939.25
Surplus—December 31, 1935		$2,142,220.21

NOTE:—After adjustment of securities to market value.

Marketable Securities
December 31, 1935

	Par Value	
U. S. Government Securities—		
Treasury Bonds—3¼% due August 1, 1941	$ 20,000.00	
Treasury Bonds—3⅜% due June 15, 1943-1940	25,000.00	
Treasury Bonds—3⅜% due March 15, 1943-1941	25,000.00	
Treasury Bonds—3¼% due October 15, 1945-1943	25,000.00	
Treasury Bonds—3¼% due April 15, 1946-1944	100,000.00	
Treasury Bonds—3⅜% due June 15, 1947-1943	80,000.00	$275,000.00
Treasury Notes—3 % due April 15, 1937	100,000.00	
Treasury Notes—3¼% due September 15, 1937	50,000.00	
Treasury Notes—2½% due September 15, 1938	100,000.00	
Treasury Notes—2⅛% due June 15, 1939	50,000.00	
Treasury Notes—1⅜% due December 15, 1939	50,000.00	
Treasury Notes—1½% due December 15, 1940	50,000.00	400,000.00
New York State Bonds—		
Elimination of Grade Crossings—3%—1937	10,000.00	
Emergency Unemployment Relief—2¾%—1938	10,000.00	
Emergency Unemployment Relief—2¾%—1939	10,000.00	
Emergency Unemployment Relief—2¾%—1940	10,000.00	
General State Improvements—3%—1941	10,000.00	50,000.00
Railroad Bonds—		
Brooklyn & Queens Transit Corp. Consolidated Mortgage—5%—1941	50,000.00	
Chicago and Northwestern Railway Co.—1st and Ref. Mtge.—Series "C"—4½%—2037	25,000.00	
Chicago, Rock Island and Pacific R.R.—1st and Ref. Mtge.—4%—1934	50,000.00	
New Orleans, Texas and Mexico Railway—1st Series "A"—5½%—1954	25,000.00	
New York, Chicago and St. Louis R.R. Co.—Ref. Mtge.—Series "C"—4½%—1978	50,000.00	
St. Louis and San Francisco Railway—Prior Lien Mtge.—Series "B"—5%—1950	50,000.00	250,000.00
Public Utility Bonds—Domestic—		
American Water Works and Electric Co.—Series—"A"—Deb.—6%—1975	13,000.00	
Birmingham Gas Co.—Gold Notes—6%—1938	50,000.00	
Electric Power and Light Corp.—Gold Deb.—5%—2030	50,000.00	
Joplin Water Works Co.—Series "A"—1st Mtge. 5%—1957	25,000.00	
Mississippi Power and Light Co.—1st Mtge.—5%—1957	50,000.00	
National Power and Light—Series "B" Deb.—5%—2030	50,000.00	238,000.00

Other Bonds—		
Tokyo Electric Light Co., Ltd.—1st Mtge.—6%—1953	25,000.00	
Shell Union Oil Corp.—5% Deb. Sinking Fund—1947	50,000.00	75,000.00

Stocks—

	Number of Shares
American Chicle Co.—Common Stock—No Par	1,000
American Gas and Power Co.—Common Stock—Par Value $1.00	800
American Gas and Power Co.—Warrants for Subscription of Common Stock	400
American Smelting and Refining Co.—6% Cumulative Second Preferred Stock—Par Value $100.00	1,000
American Water Works and Electric Co.—$6.00 Cumulative 1st Preferred Stock—No Par	500
Arkansas Power and Light Co.—$6.00 Cumulative Preferred Stock—No Par	500
Commonwealth and Southern Corp.—$6.00 Cumulative Preferred Stock—No Par	550
Florida Power and Light Co.—$7.00 Cumulative Preferred Stock—No Par	500
Home Insurance Co.—Capital Stock—Par Value $5.00	600
Iowa Southern Utilities Co. of Delaware—7% Cumulative Preferred Stock—Par Value $100.00	500
Jersey Central Power and Light Co.—5½% Cumulative Preferred Stock—Par Value $100.00	500
Louisiana Power and Light Co.—$6.00 Cumulative Preferred Stock—No Par	500
National Power and Light Co.—$6.00 Cumulative Preferred Stock—No Par	800
Ohio Edison Co.—$6.00 Cumulative Preferred Stock—No Par	500
Potomac Edison Co.—6% Cumulative Preferred Stock—Par Value $100.00	300
Public Service Co. of Indiana—$7.00 Cumulative Prior Preferred Stock—No Par	500
West Penn Electric Co.—6% Cumulative Preferred Stock—Par Value $100.00	500
Market Value—December 31, 1935	$1,820,196.56

Report of Auditors

Board of Directors

New York and Honduras Rosario Mining Company:

We have made an examination of the Balance Sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY —NEW YORK CITY, as at December 31, 1935, and of the statements of Income and Surplus for the year ended on that date. In connection therewith, we examined or tested accounting records of the Company and other supporting evidence at the New York office and the mine office in Honduras, including examination of the minutes of stockholders and directors meetings; we also made a general review of the accounting methods and an audit of the operating and income accounts for the year.

Cash, securities, and bullion were verified by actual count, inspection of certificates and documents, or by direct communication with depositories. Provision for depletion and depreciation, as in the past, represents the maximum amount permitted on book values under Federal Revenue Acts.

In our opinion, based upon our examination and information submitted to us, the accompanying Balance Sheet and related statements of Income and Surplus show, in accordance with accepted principles of accounting consistently followed by the Company during the year under review, its financial condition at December 31, 1935, and the results of its operations and changes in surplus for the year then ended. No contingent liabilities were reported to us and none was disclosed by our examination.

ERNST & ERNST.

February 6, 1936.

Table Showing

Bullion Production — Distribution to Stockholders

1882	$2,452.27	1887	No. 1	$ 37,500— 2½%	($ .25 per share) Dividend
1883	12,900.42	1888	Nos. 2 to 8	112,500— 7½%	(.75 per share) Dividend
1884	149,741.39	1889	Nos. 9 to 14	97,500— 6½%	(.65 per share) Dividend
1885	244,444.70				
1886	224,157.58	1891	Nos. 15 to 17	45,000— 3%	(.30 per share) Dividend
1887	613,446.05	1892	Nos. 18 to 22	187,500—12½%	(1.25 per share) Dividend
1888	767,632.15	1893	Nos. 23 to 26	150,000—10%	(1.00 per share) Dividend
1889	590,189.55				
1890	113.28	1896	Nos. 27 to 30	60,000— 4%	(.40 per share) Dividend
1891	369,587.19	1897	Nos. 31 to 42	180,000—12%	(1.20 per share) Dividend
1892	614,498.67	1898	Nos. 43 to 50	120,000— 8%	(.80 per share) Dividend
1893	492,534.87	1899	Nos. 51 to 63	195,000—13%	(1.30 per share) Dividend
1894	392,485.92	1900	Nos. 64 to 78	255,000—17%	(1.70 per share) Dividend
1895	158,164.42	1901	Nos. 79 to 95	255,000—17%	(1.70 per share) Dividend
1896	449,525.88	1902	Nos. 96 to 100	75,000— 5%	(.50 per share) Dividend
1897	568,872.06	1903	No. 101	15,000— 1%	(.10 per share) Dividend
1898	611,467.76	1904	Nos. 102 to 110	135,000— 9%	(.90 per share) Dividend
1899	798,994.77	1905	Nos. 111 to 124	195,000—13%	(1.30 per share) Dividend
1900	827,443.12	1906	Nos. 125 to 142	285,000—19%	(1.90 per share) Dividend
1901	780,760.18	1907	Nos. 143 to 155	195,000—13%	(1.30 per share) Dividend
1902	490,273.34	1908	Nos. 156 to 167	180,000—12%	(1.20 per share) Dividend
1903	436,818.29	1909	Nos. 168 to 175	120,000— 8%	(.80 per share) Dividend
1904	721,374.87	1910	Nos. 176 to 181	120,000— 8%	(.80 per share) Dividend
1905	993,065.39	1911	No. 182	45,000— 3%	(.30 per share) Dividend
1906	1,112,171.69	1912	Nos. 183 to 184	70,000— 3½%	(.35 per share) Dividend
1907	791,347.62				
1908	788,910.23	1913	Nos. 185 to 189	220,000—11%	(1.10 per share) Dividend
1909—10 months	636,500.00	1914	Nos. 190 to 194	260,000—13%	(1.30 per share) Dividend
1910	890,700.00	1915	Nos. 195 to 199	280,000—14%	(1.40 per share) Dividend
1911	887,169.59	1916	Nos. 200 to 207	400,000—20%	(2.00 per share) Dividend
1912	944,212.67				
1912-13—12 months	1,051,273.28	1917	Nos. 208 to 212	260,000—13%	(1.30 per share) Dividend
1913—last 3 months	328,100.05	1917	Nos. 1 and 2	140,000— 7%	(.70 per share) Amortization
1914	1,239,877.13	1918	Nos. 213 to 216	200,000—10%	(1.00 per share) Dividend
1915	1,191,760.70	1918	Nos. 3 to 6	200,000—10%	(1.00 per share) Amortization
1916	1,553,114.86	1919	Nos. 217 to 220	200,000—10%	(1.00 per share) Dividend
1917	1,674,193.80	1919	Nos. 7 to 10	200,000—10%	(1.00 per share) Amortization
1918	1,803,751.79	1920	Nos. 221 to 226	320,000—16%	(1.60 per share) Dividend
1919	2,115,158.25	1920	No. 11	40,000— 2%	(.20 per share) Amortization
1920	1,568,612.32				
1921	466,956.02	1922	Nos. 227 to 230	200,000—10%	(1.00 per share) Dividend
1922	1,066,732.57	1923	Nos. 231 to 235	250,000—12½%	(1.25 per share) Dividend
1923	1,421,911.15	1924	Nos. 236 to 241	350,000—17½%	(1.75 per share) Dividend
1924	1,584,610.32	1925	Nos. 242 to 249	400,000—20%	(2.00 per share) Dividend
1925	1,763,023.16	1926	Nos. 250 to 257	400,000—20%	(2.00 per share) Dividend
1926	1,601,429.35				
1927	1,341,300.06	1927	Nos. 258 to 265	400,000—20%	(2.00 per share) Dividend
1928	1,500,233.98	1928	Nos. 266 to 274	450,000—22½%	(2.25 per share) Dividend
1929	1,477,710.79	1929	Nos. 275 to 283	500,000—25%	(2.50 per share) Dividend
1930	1,315,821.38	1930	Nos. 284 to 290	371,677—18¾%	(1.87½ per share) Dividend
1931	1,403,104.20	1931	Nos. 291 to 297	364,159—18¾%	(1.87½ per share) Dividend
1932	1,355,117.43	1932	Nos. 298 to 303	283,874—15%	(1.50 per share) Dividend
1933	1,910,740.17	1933	Nos. 304 to 312	659,324—35%	(3.50 per share) Dividend
1934	1,965,520.68	1934	Nos. 313 to 321	753,468—40%	(4.00 per share) Dividend
1935	2,109,313.47	1935	Nos. 322 to 330	800,559—42½%	(4.25 per share) Dividend
	$52,171,322.83			$12,033,062	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 284, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00
Dividends 285 to 330 inclusive, were paid on outstanding capital stock.

GENERAL MANAGER'S REPORT

January 1, 1936.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company:

Operating results obtained during the year 1935, likewise details indicating the physical condition of the Company's property in Honduras, at the close of the year, are summarized below:

Production

	1935	1934
Dry Tons Treated	156,800.	155,100.
Average Per Ton—Troy Ozs. Silver Milled at the Mine	18.3868	21.8188
Average Per Ton—Troy Ozs. Gold Milled at the Mine	.0833	.0928
Total Troy Ozs. Silver Milled at the Mine	2,883,050.	3,384,096.
Total Troy Ozs. Gold Milled at the Mine	13,061.	14,393.
Total Troy Ozs. Silver Produced at the Mine	2,646,411.	3,101,357.
Total Troy Ozs. Gold Produced at the Mine	12,236.	13,019.
Average Per Ton—Troy Ozs. Silver Produced at the Mine	16.8776	19.9958
Average Per Ton—Troy Ozs. Gold Produced at the Mine	.0780	.0839
Ratio of Gold to Silver	1:216	1:238
Bars of Doré Bullion	1,616.	1,861.
Bullion Fineness of Silver	975.66	976.48
Bullion Fineness of Gold	4.511	4.099
Custom Ore and Bullion—Not Included Above		
Troy Ozs. Silver	762.49	....
Troy Ozs. Gold	198.8053	128.573

A new tonnage record was established, 156,800 tons milled, compared to 155,100 during 1934.

The substantial improvement in the price of silver during the year permitted the inclusion in the mill feed of certain ores of lower grade that otherwise could not be mined and milled at a profit, and thereby contributed to prolonging the life of the enterprise. The net result was that it was possible to treat ore averaging practically three and a half ounces silver less per ton than during 1934, with greater operating profits than ever before.

The uncertain condition of the silver market at the end of 1935 precludes, at this time, the formation of a fixed production policy for the year 1936. Suffice it to say that the mine is in excellent condition to cope, within reasonable limits, with lower silver prices.

Honduras Operating Costs in U. S. Currency

	Tons 1935		Tons 1934
Broken Ore Reserve 1/1/35	45,720	Broken Ore Reserve 1/1/34	33,387
Ore Mined—1935	155,983	Ore Mined—1934	168,318
Total	201,703	Total	201,705
Ore Milled—1935	156,800	Ore Milled—1934	155,100
Broken Ore Reserve 1/1/36	44,903	Broken Ore Reserve 1/1/35	46,605
Broken Ore Reserve measurements adjustment 1/1/36	.....	Broken Ore Reserve measurements adjustment 1/1/35	885
Broken Ore Reserve, Actual 1/1/36	44,903	Broken Ore Reserve, Actual 1/1/35	45,720
Total Troy Ounces Silver produced	2,646,411	Total Troy Ounces Silver produced	3,101,357
Total Troy Ounces Gold produced	12,236	Total Troy Ounces Gold produced	13,019
Feet Exploration and Development Driven	34,945.5	Feet Exploration and Development Driven	31,837
Diamond Drilling—Feet Driven	454.0	Diamond Drilling—Feet Driven	4,325

YEAR—1935			Total Costs	YEAR—1934		Total Costs	Cost Per Ton 1935	Cost Per Ton 1934	Cost Per Ounce of Silver 1935	Cost Per Ounce of Silver 1934
MINING										
Labor		$330,840.61			$339,768.22					
Supplies		235,829.34			238,476.40					
Power		5,196.70			4,608.72					
Depreciation, Etc.		8,869.17			4,962.02					
Ore Mined and Milled										
First of Year	$186,068.87			$136,434.50						
Last of Year	196,393.82	Cr. 10,324.95	$570,410.87	186,068.67	Cr. 49,634.37	$538,180.99	$3.64	$3.47	$.2159	$.1741
MILLING					$ 54,178.95					
Labor		$ 64,773.22			172,446.16					
Supplies		175,746.54			9,135.08					
Power		10,526.65			26,150.26	$261,910.45	$1.85	$1.69	$.1100	$.0847
Depreciation, Etc.		39,662.32	$290,708.73							
ADMINISTRATION					$177,259.35					
Labor and Supplies		$192,432.28								
Depreciation, Etc.		11,119.49	$203,551.77		$10,454.09	$187,713.44	$1.30	$1.21	$.0771	$.0607
			$1,064,671.37			$987,804.88	$6.79	$6.37	$.4030	$.3195
Mine Yearly Concession Expense			15,000.00			15,000.00	.09	.09	.0057	.0049
			$1,079,671.37			$1,002,804.88	$6.88	$6.46	$.4087	$.3244
Credit for Gold			429,676.02			455,127.27	2.74	2.93	.1626	.1472
Net Cost of Silver			$649,995.35			$547,677.61	$4.14	$3.53	$.2461	$.1772

Honduras Operating Costs

The three departments, Mine, Mill and Administration, operated at a higher cost than the previous year, a total increase of $76,866.49 or $0.42 per ton.

The largest increase in operating costs occurred in the Mine Department and can be attributed to two factors, i.e.; an increase in development and exploration of 3,108 feet, accompanied by a lower percentage of development ore that could be sent to the mill; and a greater proportion of stoping in hard and narrow veins compared to the year 1934, resulting in a lower tonnage broken per machine.

The increase in milling costs is almost entirely attributable to increased Mechanical and Electrical Department charges to the mill. The rearrangement of electrical equipment and renewal of conductors called for an increased outlay better to assure continuous operation.

In the Administration Department the principal increases occurred in Repairs to Buildings, Insurance, Water and Fire System, and Auto Expense. Although the year 1936 will call for a relatively heavy outlay for maintenance of buildings it is anticipated that, with normal uninterrupted operations, Administration charges per ton will show a decrease.

THE MINE

Ore Reserves

Active ore reserves as of January 1, 1935 and of January 1, 1936, are summarized in the comparative table below:

Comparative Summary—Active Ore Reserves

	Tons of Ore Plus Waste	Av. Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
January 1, 1936	606,142	28.84	.1832	17,481,401	111,068
January 1, 1935	571,820	28.39	.1605	16,233,450	91,800

Ore reserves are based on silver at 40 cents and gold at $35.00 a Troy ounce.

There was mined during the year 156,800 tons, containing 2,883,050 ounces of silver and 13,061 ounces of gold, and the substantial increase in ore reserves indicates that results of development and exploration throughout the year were satisfactory.

Comparative Summary—Inactive Ore Reserves

	Tons of Ore Plus Waste	Av. Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
January 1, 1936	38,542	13.73	.0488	529,091	1,881
January 1, 1935	38,610	13.72	.0489	529,660	1,888

The distribution of total ore reserves is set forth in detail in Annexes "A" and "B."

Ore Production

	1935	1934	1933	1932	
By Stoping	105,548	98,655	102,471	123,018	tons
From Development Excavations	51,327	56,300	44,880	19,336	"
Total	156,875	154,985	147,351	142,354	"
Development Feet Driven	34,945.5	31,837	25,574	23,022.5	"

The details of the individual vein production during the year 1935 are given in Annex "D."

Development produced 32.7% of the tonnage milled, or 3.6% less than the previous year.

With the area for development more limited than it was a year ago, it is entirely possible that the year 1936 will be more dependent upon ore from stopes than was the case during the past two years.

The following table shows the comparison of the daily labor employed in each department:

Average Number of Men Per Day

	1935	1934	
Number of days	365	365	
Mine	577.07	601.97	Men
Mill	72.22	67.82	"
Administration	35.49	28.70	"
Surface & Construction	109.96	89.33	"
Hotel	5.00	5.00	"
Laboratory	2.85	1.99	"
Electrical	38.42	36.20	"
Mechanical	35.18	36.56	"
Police, San Juancito	33.00	31.50	"
Police, Rosario	20.00	20.00	"
Totals	929.19	919.07	"

Exploration, Development and Mining

Annex "C" shows in detail the total exploration and development footage during 1935, as summarized in the following table:

Year	Drifts	Cross-cuts	Raises	Winzes	Total	
1935	17,315	9,983.5	7,580	67	34,945.5	feet
1934	13,396	9,650.5	8,790.5	..	31,837.0	"

A new record was established in development and exploration footage.

Of the total cross-cut footage shown for the year 1935, over 5,000 feet was purely exploration, compared to less than 2,000 feet the previous year. That exploration was but moderately successful. A few new veins were encountered but their character and grade, indicated by development to date, give but little promise that they will develop into large ore producers. They will be referred to in more detail under their respective names.

Vein development was relatively heavy throughout the year as indicated by the 17,315 feet of drifting.

Operating Cross-cuts and Raises Below the Peña Blanca Level

A waste pass in the Santa Fe section was completed from the Lower 650 to the Lower 400 level, thus giving, with the ore pass completed in 1934, a ready disposal to the haulage level of the rather heavy development and exploration breakage in that section on the Lower 400 and Lower 500 ft. levels. Not until the existence is proven of a considerably larger tonnage of ore above the Lower 300 ft. level than appears at present, will the continuation of these raises be warranted.

The Jucuara material handling raise, mentioned in last year's report, was completed and the cage is in operation between the Peña Blanca or Upper 150 and the Lower 400 ft. levels. Below the Lower 400 ft. level a sufficiently large tonnage of ore is known to exist to warrant the downward extension of this material handling raise. It therefore will be completed to the Lower 650 ft. level. It is expected that by the close of the year the material cage will operate between the two main haulage levels, thus serving the intervening five levels.

Station work was limited and confined entirely to the Lower 650 and the Lower 400 ft. levels for the Jucuara material handling raise.

The ore pass on the Esperanza end of the No. 1 Fortuna vein was completed during the year between the Lower 650 and the Lower 300 ft. levels. It is known as ore pass No. 10 and is now in service from the Upper 450 ft. level to the Rosario haulage, taking ore from eight levels.

Operating Cross-cuts and Raises Above the Upper 150 ft. Level

The ore pass in Block 78 to serve the Jucuara No. 1-Fortuna vein above the Peña Blanca level was carried through to the Upper 450 ft. level. It will be continued to at least the Upper 550.

The material handling raise for the Jucuara No. 1-Fortuna vein above the Peña Blanca, mentioned in last year's report as having been started in Block 76, has reached the Upper 350 ft. level. During 1936 it will be continued to the Upper 450 and possibly higher. An air hoist is now being installed on the Upper 350 and when in operation will accelerate development in the upper reaches of the Jucuara No. 1-Fortuna vein.

Exploration Cross-cuts

Lower 400 Esperanza Cross-cut

The installation of mule haulage in this long exploration cross-cut made it possible to drive the main cross-cut with two shifts. The face was advanced a distance of 1750 feet. The branch cross-cut to the southeast was advanced 366 feet.

These cross-cuts cut nothing of interest during the year nor does the formation traversed by the main cross-cut, look particularly inviting for the possible existence of ore bodies.

The adit from the surface was started in October. It will have to be driven by hand as it is far removed from our source of compressed air supply. It now measures 135 feet. It is expected that it

will have reached its objective, the point where the raise from below will connect with it, by next September.

The completion of this work, primarily to furnish natural ventilation, will permit of several thousands of feet of exploration work into virgin territory in any direction and at any speed desired.

Lower 300 ft. Jucuara Cross-cut

The main cross-cut and its branches were driven a total of 593 feet. The branch cross-cut mentioned in last year's report, driven towards the Southwest vein, cut that vein in Block 77, a distance of 260 feet from the main cross-cut. In the same direction the cross-cut was continued an additional 140 feet. The Southwest vein, where intersected, was so badly disturbed and low grade, that there was some question as to it being the ore body sought. Subsequent development indicated that the shattered ore body first encountered must be the Southwest. To avoid expensive timbering it was decided to drive in the wall for a point in the vicinity of the old shaft, from the Upper 150 on the same vein, and where fair ore is known to exist above. Where the cross-cut again intersected the Southwest a wide loose oxidized vein was found, better defined than where first cut, but still of low grade. It is at present being developed laterally. A raise will be started early in the year to connect with the bottom of the old shaft, about 200 feet above the Lower 300 level.

From the Southwest vein on the Lower 300 level in Block 72 it is proposed to continue the cross-cut in a northerly direction. Such a cross-cut holds reasonably attractive possibilities from an exploration standpoint. It will explore the rather large territory between the West Cross-cut and the old Crucero cross-cut, both on the Upper 150 ft. level.

Upper 150 Jucuara Salvador Cross-cut

Continuation of the main cross-cut during 1935 advanced the heading 639 feet. The branch cross-cut from it was driven 240 feet. At a distance of 430 feet from the Salvador, a vein believed to be the west extension of the San Blas was encountered. At that point the direction of the cross-cut was changed to parallel the Upper 150 Esperanza cross-cut south of the Salvador vein. On January first the cross-cut had been advanced to a point almost opposite the strike of the Independencia vein and 180 feet west of its most westerly workings on the Upper 150 level. Diamond drill holes driven in the year 1933 from the west end of the Independencia on the Upper 150 level indicated the possible presence of ore bodies in the territory traversed by the last 200 feet of this cross-cut. It is disappointing to find that the cross-cut has not yet confirmed their existence.

It is proposed to continue the cross-cut at least 150 feet farther and thereafter give preference to a new cross-cut from the extreme west end of what may be the west extension of the San Blas vein. At least one surface outcrop is known to exist some 400 feet west of the present cross-cut. A 250 ft. drive from the west face of the

San Blas vein will intersect the surface vein at the Upper 150 level horizon should it exist at that depth, 460 feet below the surface.

Upper 150 West Cross-cut

The branch cross-cut started in Block 81 from the West cross-cut as mentioned in last year's report, was driven an additional distance of 835 feet. Nothing of interest was encountered and it is not proposed to continue it during 1936.

It is proposed to explore, from this branch cross-cut, the territory lying between it and the Jucuara No. 2 vein. It is also hoped that another exploration cross-cut can be started from the main West cross-cut about midway between the portal and the point from which the branch cross-cut under review started.

Zero No. 1 Cross-cut Northeast

During the year a cross-cut was started from Jucuara No. 1-Fortuna on the Zero level in Block 76, in a direction to explore the territory between Jucuara No. 1-Fortuna and projected extensions of the Carmen and Santa Gertrudis veins. At a distance of 200 feet a small vein was cut which has been called Santa Gertrudis No. 2. The cross-cut was continued past this vein and will be driven at least 500 feet further during the year.

Upper 250 Jucuara No. 1-Santa Gertrudis Cross-cut

On the Upper 250 ft. level, in 1928, a cross-cut was driven south from the Santa Gertrudis vein, a distance of 500 feet, and reached within 250 feet of the Jucuara No. 1-Fortuna vein, discovered later. To explore the intervening territory between the end of that cross-cut and the Jucuara No. 1-Fortuna vein, as also to improve ventilation, it was decided to connect the Upper 250 Jucuara No 1 with that cross-cut. At a distance of 130 feet from the Jucuara No. 1-Fortuna a low grade vein was encountered which is probably the upper extension of the Santa Gertrudis No. 2 on the Zero level.

During the year it is proposed to do some exploration cross-cutting from the Upper 350 Jucuara No. 1 in a direction towards the Southwest vein to pick up any possible faulted east sections of the Jucuara veins.

Lower 400 Santa Fe No. 2 Cross-cut North

Early in the year it was decided to cross-cut the entire territory between the Santa Fe No. 2 and the west end of the Independencia vein on the Lower 400 ft. level. Consequently a cross-cut was started from the Santa Fe No. 2 vein in Block 88 more or less at right angles to the veins and fractures in that territory. At a distance of 140 feet a narrow but good grade stringer was encountered. It has been named the San Benito No. 2. At a distance of 250 feet from the Santa Fe No. 2 another fair grade vein was encountered which, if not the actual San Benito, must be a stringer from it. The cross-cut was continued and on January 1, 1936 the face was 500 feet from the Santa Fe No. 2, leaving approximately 350 feet to the Independencia vein. The section near the Indepen-

dencia was previously diamond drilled and although nothing of great interest was indicated, there is reason to believe that at least one more vein may be encountered.

Veins cut by the cross-cut will necessarily have to be developed on levels above and below. The Lower 500 will require a cross-cut, already started. Although the veins can be developed independently above by raises, poor ventilation in that section dictates the advisability of connecting them also on the Lower 300 level by a cross-cut.

Lower 400 Santa Fe No. 2 Cross-cut South

The territory south of the west end of the Santa Fe No. 2 vein is considered also favorable ground for exploration. In conjunction with the cross-cut north, late in the year a cross-cut was started south from the Santa Fe No. 2 in Block 89. It is planned to drive it several hundred feet during the year.

New Exploration Planned for the Year 1936

In addition to the work outlined in connection with the cross-cut mentioned above, entirely new exploration work is under consideration.

Active exploration of the Rosario side of the mountain south of the San Juancito River, is desirable. A surface adit will be started early in the year from the vicinity of the intake of the Peña Blanca flume which leads to the Aguacatal penstock. Its elevation will coincide with the Upper 150 ft. level. 3500 feet of 4 inch air pipe line has already been ordered for this work. The portal will be approximately that distance from the compressors. Present plans are to drive, from approximately the same point, two cross-cuts; one in a southwesterly direction more or less parallel to the Lower 400 Esperanza cross-cut, but approximately 5,000 feet southeast of it; the other southeast through the ridge between the San Juancito and the Escobales Rivers.

Operating conditions permitting, it is also planned to explore, on the Lower 300, the territory west of the San Miguel vein, south and near the San Vicente.

In addition, to the above mentioned relatively large exploration cross-cut projects, it is proposed to thoroughly explore west of the present limits of the Jucuara veins for possible extensions of them.

Veins Worked in 1935

Twenty-three veins contributed to the 1935 ore production, as follows: Salvador; Jucuara No. 1-Fortuna; Independencia; Jucuara Nos. 2, 3, 4 and 5; Santa Fe Nos. 1, 2 and 3; San Benito Nos. 1 and 2; Fortuna North; Veta No. 4; Santa Gertrudis No. 2; San Blas; Porvenir; Carmen; San Joaquin; Colonia; Capitana; Northwest and Southwest.

Salvador Group

Salvador

Although this vein again heads the list of producers, with 43,191 tons, it still shows, unbroken, an ore reserve of some

40,000 tons. An unexpected addition was made to it through the discovery of a good branch vein in the south wall of the Salvador above and below the Upper 150 ft. level. Its lateral limits have already been defined. It leaves and comes back to the Salvador within a distance of approximately 300 feet. The Upper 350 ft. level at the extreme west end also added to reserves.

1551 feet of exploration and development was done in this vein during the year, principally on the Zero, Upper 150, and Upper 350 ft. levels.

The Salvador should produce a good tonnage of fair grade ore in 1936 but it is expected that of its present ore reserves 50% will be depleted during the year.

Jucuara No. 1-Fortuna

The 8,007 feet of development in this vein represents the largest single vein development. Inasmuch as the field for future development lies entirely above the Upper 350 ft. level it will not be possible to continue it at the same rate of speed as formerly. The upper reaches still present attractive possibilities and it is hoped to complete the Upper 450 ft. level and get well started on the Upper 550 during the year.

Production amounted to 26,147 tons of which 41% came from development. Stoping will be carried on during the year but on a conservative basis.

The Lower 400 ft. level, which will be connected from the Jucuara and the Esperanza ends in January of 1936, added in a small way to the reserves. On the whole that level was disappointing and the advisability of opening the Lower 500 ft. level is questionable, unless the price of silver improves.

Fortuna-North

Mining in the Fortuna-North was confined almost entirely to stoping above the Upper 350 ft. level. A very small amount of development was done on the same level in a branch of the south end of the vein. 5,436 tons of ore were produced. A stope 165 feet long was taken up to the height of the Upper 450 ft. level, which level has not yet been opened. The ore in the back of the stope was fully as good as below. Additional ore can therefore be expected above the Upper 450. Another stope 120 feet long is now being taken up adjacent to the one finished.

Although located in an isolated and rather inaccessible section of the mine the ore is fair grade and cheap to mine. Production should about equal that of last year. It presents but a small field for development and that chiefly upward.

Independencia Group

Independencia

Production of 20,574 tons reduced this vein's reserves 50%. Practically all the ore came from stopes.

Santa Fe Group

San Benito Vein No. 1

1,759 feet of development, in this vein during the year, resulted in a gain of ore reserves, almost offsetting its depletion for the year of 9,823 tons.

Territory for lateral development has been fairly well eliminated. The west end of the vein, which has produced a good tonnage of fair grade ore, had not previously been explored below the Lower 250 ft. level. It was cut on the Lower 400 ft. level by the Santa Fe No. 2 cross-cut referred to above. At that horizon the vein is narrow but fairly good grade and it is expected that new ore reserves will be added above the Lower 400 ft. level. 200 feet of drifting was done on that level.

This year development will be considered above the Upper 250 ft. level. Mining there was stopped in the year 1928, the vein having entered a badly crushed zone.

San Benito Vein No. 2

This is a new vein, referred to under "Exploration Cross-cuts," encountered on the Lower 400 ft. level between the Santa Fe No. 2 and the main San Benito. 863 feet of development was done on the Lower 400 and Lower 300 ft. levels. Although of high grade, particularly in gold, the vein structure does not favor the existence of large ore bodies. On the Lower 400 ft. level the vein has thus far been developed 300 feet west of the cross-cut. The Lower 500 ft. level is now being opened and this year should also show considerable development on the Lower 300. It already shows an ore reserve of 7,186 tons.

Santa Fe Vein No. 1

Exploration and development amounted to 190 feet, production to 2,840 tons. With the exception of one small block of ore below the Lower 450 level, of less than 2,000 tons, this vein has been entirely depleted.

Santa Fe Vein No. 2

Development was fairly active during the year and resulted in a footage of 2,463. This development produced 4,684 tons of ore and the total production, including a small amount of stoping, amounted to 6,176 tons. Total ore reserves on this good gold bearing vein increased from 43,500 to 55,961 tons, estimated to contain nearly 3,000,000 ounces of silver and approximately 30,000 ounces of gold.

Unless the continuation of the vein above the Lower 250 ft. level can be found during the year, any substantial addition to this reserve is unlikely.

Besides continuing development and exploration, it is proposed, early in the year, to stope from the Lower 650 ft. level. The ore at that level is hardly of minable grade but has a high ratio of gold and good ore is expected a short distance above the level. Exceptional values exist on the Lower 500.

Santa Fe Vein No. 3

Development was completed on the Lower 400 early in the year and continued actively on the Lower 500. Development aggregated a total of 1,931 feet. Total production amounted to 7,822 tons, of which 38% came from development.

The erratic structure of this vein will result in a heavy waste dilution when stoped. It will therefore break much lower grade than the Santa Fe No. 2.

It is planned to continue stoping during the year. It is an ideal vein to use to improve the gold ratio in production when desired.

Ore reserves added to those already existing on Santa Fe No. 3 did not keep pace with depletion, but the reserves are but 2,000 tons less than a year ago. It is expected that the end of 1936 will show considerable depletion.

Santa Fe Veins (General)

The possibilities of still finding new limited ore bodies in the Santa Fe network of veins have not been exhausted.

Jucuara Group

Jucuara Vein No. 2

Ore output from Jucuara Vein No. 2, amounted to 8,379 tons. 2,858 feet of development produced 7,712 tons of ore, or 92% of the total production. Stoping was confined to a small low grade section on the Lower 200 ft. level.

Development was limited to the Upper 250, the Zero, the Lower 200 and the Lower 400 ft. levels, the greater part on the Lower 400. Unlike the Jucuara No. 1-Fortuna vein, the Jucuara No. 2 has responded favorably on the Lower 400 and a large tonnage of high grade ore, exceptionally good in gold content, has been added through such development.

Ore reserves were increased from 76,000 tons to over 88,000 tons, containing approximately 2,500,000 ounces of silver and 24,000 ounces of gold.

On all levels below Peña Blanca, the Jucuara vein No. 2 has been terminated, by its intersection, with what is known as 56 Fault vein. The intersection of these two veins travels westward with depth. Development on the Lower 400 level has already passed the west end of the ore on the Lower 300 level and the vein continues. At least 200 feet more can be expected in the same direction in Jucuara No. 2 before No. 56 Fault is encountered. With that additional 200 feet, the Jucuara Vein No. 2 on the Lower 400 will have a total length of about one thousand feet, tapering off to practically nothing by the time the Upper 250 ft. level is reached.

An energetic effort to locate the continuation of Jucuara No. 2 and Jucuara No. 3 veins on the Upper 250 level, was disappointing in results. The existence of any substantial ore bodies in either of them on or above that level appears exceedingly doubtful.

During the year 1936, it is proposed to also prosecute development as rapidly as conditions will permit on the Lower 500 and the Lower 650 ft. levels. It is probable that good ore will be found on the Lower 500 and possibly as low as the Rosario haulage level, but in a more limited amount.

Jucuara Vein No. 3

2,211 feet of development in the Jucuara No. 3, resulted in the production of 4,665 tons of ore. Combined stoping and development tonnage amounted to 6,835 tons. Ore limits, both vertically and horizontally appear to have been outlined and its reserves from now on can be expected to show a gradual decline, depending on the rate of stoping. Only a small section 180 feet long was

stoped during 1935, from the Lower 300 to the Lower 200 ft. levels, in Block 82.

Increased stoping operations are planned for the year 1936, largely in low grade sections above the Lower 200 ft. level and above the Lower 400.

Jucuara Vein No. 4

Development amounted to 1,739 feet, total production to 2,629 tons, all from development.

The Lower 400 and Zero levels received the main attention. The best ore was encountered on the Zero level near the eastern extremity of the vein.

Ore reserves were increased from 28,500 tons to 34,500 tons. Substantial additions cannot be expected, as ore limits have been fairly well defined. The Lower 200 level may still contribute something new.

Jucuara Vein No. 5

This is a new vein, first developed on the Lower 400 level, taking off in a westerly direction from Jucuara vein No. 4, in Block 85. It was developed laterally during the year 250 feet. Although of low grade, raises from the Lower 400 indicate that better ore may be encountered above, and its development on the upper levels will be prosecuted during the year.

56 Fault Vein

This fault, although not ore bearing in its greater extent, shows isolated values on the various levels. Near its intersection with Jucuara No. 2, sufficient ore has been found to warrant including it as a separate vein. As an ore producer it will never be important. A stope is now being prepared on it from the Lower 300 ft. level in Block 87. The ore will be low grade, but of a good gold ratio.

Jucuara Veins (General)

Apart from the development to be yet completed on the Lower 400, 500 and 600 ft. levels in the Jucuara vein No. 2, the Jucuara ore bodies in general can be considered very near the end of the development stage.

Considerable cross-cutting was done on the Lower 300 ft. level in an effort to locate the possible extension of Jucuara vein No. 2 on the northwest side of No. 56 fault. Such efforts were unsuccessful, but the possibility of the existence of such an extension still appears sufficiently strong to warrant a continuation of such exploration work. Further attempts will therefore be made to find an extension by cross-cutting and raising on other levels.

Old Mine Group

Capitana

500 feet of development in the Capitana consisted of 315 feet of drifting and 185 feet of raising. Mining consisted principally of stoping and the total production resulted in 3,385 tons, of which only 756 tons came from development.

Recovery work on the Capitana has progressed sufficiently to permit stoping on levels below the Peña Blanca. A stope is already under way on the Zero level and one is being prepared on the

Lower 200. Stoping above the Peña Blanca level was finished during 1935 and production came largely from that territory.

The Capitana for 1936 should produce on a scale comparable to the year just closed.

San Joaquin

Recovery work on this old vein progressed satisfactorily during the year, reaching the Lower 300 ft. level. Recovery of that level is being prosecuted from the east end through access from the Rosario haulage level and from the west end through the recovery of the San Miguel vein on the Lower 300 to the intersection of the San Joaquin. Combined stoping and development produced 2,082 tons. Development consisted entirely of raising and produced but 811 tons.

Resampling of the San Joaquin where recovered and where new raises have been driven, failed to demonstrate the existence of as good ore as was originally hoped for when this work was begun.

Production during 1936 will not be heavy and may not even equal that of 1935. Some good pockets of gold ore exist and these will be mined as general operating conditions permit.

South San Miguel Stringer

Late in the year, it was decided to connect the Esperanza cross-cut to the west face of the South San Miguel Stringer on the Peña Blanca level. Whether or not any ore is encountered in the intervening 200 feet of vein, this connection will permit of the release of considerable pipe and track now maintained through the Culebra and into the South San Miguel Stringer. Should any ore be encountered, it can be stoped and delivered through the Esperanza cross-cut.

Colonia

Of the old veins, the Colonia appeared the most attractive for development. During the year, 749 feet were driven, the greater part consisting of drifting on the Lower 400. Production amounted to 3,481 tons, of which 1,157 tons or 33% came from development. Drifting southward on the Lower 400 responded favorably and a stope 110 feet long on that level is now ready for operation. This south drift, also encountered in December a narrow oxidized vein of encouraging aspect. Development on the cross vein will be prosecuted together with further work on the Colonia. The Colonia south drift will be carried to its intersection with the Nueva vein some 200 feet south.

It is proposed during the year to stope from both the Lower 400 and Lower 300 levels and at least 3,000 tons production can be anticipated, metal prices permitting.

Southwest Vein

The chief item of interest regarding the Southwest vein is its intersection on the Lower 300 ft. level by the Jucuara cross-cut. Limited development precludes any accurate estimate of the possibilities of the vein at that level. Where first encountered however, the vein was low grade, too low to be considered ore. It is

hoped that further development on it will disclose more attractive sections.

Besides developing several hundred feet on the Southwest vein, it is planned to also cross-cut to the Santa Gertrudis on the same level and at the same time connect the Lower 300 level with the old winze sunk on the Southwest vein, from the Peña Blanca level. Some minable ore is known to exist below previous lowest workings, but whether that ore will extend to the Lower 300 level appears doubtful.

Miscellaneous Group

Veta No. 4

Mining on this vein was confined entirely to 653 feet of development on the Upper 350 ft. level, which work produced for the mill 1,319 tons of ore, from what may be considered an entirely new vein of low grade. For ready reference in the future, this new vein is to be called Veta 4 South, while the old developed Veta No. 4 will be known as Veta 4 North.

Development was concentrated on the south face of Veta No. 4, and at a distance of approximately 200 feet south of the Esperanza cross-cut, a narrow sulphide vein was encountered, taking off from the old Veta No. 4 vein in a southeasterly direction. It has an entirely different strike from Veta 4 North. Should the vein continue on its present strike, it will eventually join the south end of the Salvador, in or close to Block 68. A level on this new vein was extended during the year a distance of 540 feet permitting the blocking out of 5,446 tons of low grade ore.

Veta 4 North, is a low grade oxidized ore of quite erratic structure. Veta 4 South, shows no oxidation, but in structure is little better than the north section. Some high grade sulphide pockets have been encountered, but in general it can be said that the vein at this level does not promise great value. On the other hand, the presence of good ore in it and its persistence, warrants the assumption that at some other horizon the vein should be better.

To intersect the possible downward extension of the vein, a cross-cut is under way from the end of an old cross-cut, driven some years ago from the Porvenir vein, to intersect a possible extension of Veta 4 to the south. Should Veta 4 South extend to the Upper 150 ft. level, 250 feet below, it should be intersected by the first of February of this year.

The entire Veta 4, Fortuna-North and Carmen district, is considered one of the most attractive exploration sections existing today. It is believed it will be a sufficiently large and productive territory to warrant making it more accessible through more convenient ore outlets and improved material handling facilities. This phase will receive serious attention during the year 1936.

Porvenir

It connection with the development of the Veta 4, a short cross-cut was driven from the northwest end of the Fortuna North on the Upper 350 ft. level, to intersect and develop the Porvenir vein north of the Esperanza cross-cut. From that cross-cut 133

feet of drifting was done on the Porvenir and some fair ore exposed. The vein is narrow but well defined and invites further development. Early in the year, it is expected that the Upper 350 ft. level will have reached the raise driven from the Upper 250 in another section of the Porvenir vein in Block 60, just south of the Esperanza cross-cut.

Total production amounted to but 133 tons. The year 1936 should show a heavier production from this vein.

Santa Gertrudis No. 2

This new vein mentioned above as having been intersected by cross-cuts from the Jucuara No. 1-Fortuna on the Zero and Upper 250 levels, produced from development alone, 948 tons of ore. 859-½ feet of development were done thereon.

On the Upper 250 level, the vein appears stronger than on the Zero and occasional good pockets of ore were encountered. On the higher level the vein has been exposed a lateral distance of 450 feet. As the vein was being developed, it showed indications of adding considerably to low grade ore reserves. However, values are so erratic, that the calculation of reserves does not warrant including it at this time.

The vein occurs in quite a strong and persistent fracture and it is proposed during the year to explore it at other horizons.

Carmen No. 2

This is a new vein encountered first on the Lower 200 ft. level by following a stringer from the extreme east end of the Jucuara No. 1-Fortuna. In strike, it parallels the old Carmen, but on the Lower 200 it is approximately 200 feet west of the projected dip of that vein. It may be a faulted section of the Carmen. It was also developed in a small way on the Zero level, total development on both levels amounting to 781 feet. It produced 1,105 tons of low grade ore.

It is a vein well worthy of further development, but at present its inclusion in ore reserves is not warranted.

San Blas

The west extension of the San Blas vein was intersected as mentioned previously by the Upper 150 Salvador-Jucuara cross-cut. Development westward from the cross-cut was carried a distance of 460 feet. Development eastward followed a distinctly separate stringer from the San Blas. Development thereon of 250 feet indicates that it will probably lead into the Salvador vein in the vicinity of the Esperanza cross-cut.

Total development amounted to 785 feet and sufficient development ore was secured from the work to send 1,071 tons to the mill.

Completion of the development of the San Blas-Salvador stringer east of the cross-cut, will permit of further exploration of the San Blas proper.

Although not sufficient is known about these two veins to warrant making any additions on their account to the ore reserves, it is expected that further development during the year will permit of their inclusion next year.

Diamond Drilling

Only 454 feet of diamond drilling was done during 1935.

Mine Equipment

The new 67-½ cubic ft. haulage cars were put in service in the month of September and have proved satisfactory.

In general, the mine equipment, track and pipe lines are in excellent shape and no major additions or replacements are contemplated during 1936.

THE MILL

Tonnage Crushed

	1935	1934
Total wet tons received	170,570.89	168,959.73
Average per cent of moisture	8.0293	8.2710
Total dry tons milled	156,800.	155,100.
Average tons milled per day (365 days)	430.	425.
Average tons milled per day, full running time	467.	454.
Average tons milled per day, per 1,850 lbs. stamps	22.9	22.7
Number of 1,850 lbs. stamps	20.	20.
Total tons treated by mill to Dec. 31st, 1935	2,654,408.	2,497,608.

Recovery

	1935	1934
Average ounces silver received per ton	18.387	21.819
Total ounces silver produced	2,883,050.	3,384,096.
Average ounces silver recovered per ton	16.878	19.996
Total ounces silver recovered	2,646,411	3,101,357.
Average silver recovery, per cent	91.792	91.645
Average ounces gold received per ton	.0833	.0928
Total ounces gold received	13,061.	14,393.
Total ounces gold recovered per ton	.0780	.0839
Total ounces gold recovered	12,236.	13,019.
Average gold recovery, per cent	93.637	90.409

Supplies Used

	1935	1934	1935	1934
	Per ton of ore crushed		Per oz. fine bullion produced	
	156,800 Tonnage	155,100	Grade of ore Ag. 18.387 Au. .0833	Ag. 21.819 Au. .0928
Cyanide (100% KCN)	3.337848 lbs.	3.767680 lbs.	.196857	.187628
Steel Balls	.332526 "	.045132 "	.019611	.002248
Zinc Dust	.592685 "	.689452 "	.034955	.034336
Muriatic Acid	.063807 "	.076370 "	.003763	.003803
Lime	17.822021 "	17.730070 "	1.051096	.882980
Borax Glass	.018176 "	.023533 "	.001072	.001172
Soda	"	.002128 "		.000106
Fuel Oil	.030268 gals.	.033482 gals.	.001785	.001667
Tube Mill Rock	63.418367 lbs.	65.400390 lbs.	3.740249	3.257024
Sulphur	1.802455 "	2.055609 "	.106304	.102372

Treatment Period Detail

	1935				1934			
	Hrs.	Min.	Ag. %	Au. %	Hrs.	Min.	Ag. %	Au. %
Extraction by Crushing Solution	9	00	38.04	73.23	9	00	39.39	73.17
Extraction by Agitation	91	27	54.22	20.65	82	56	52.66	16.92
Extraction in Slime Presses	1	05	.51	.72	1	05	.38	1.07
	101	32	92.77	94.60	92	61	92.43	91.16
Less Dissolved Value Loss			.98	.96			.78	.75
Recovery			91.79	93.64			91.65	90.41
Per Cent Sand Not Passing 250 mesh			30.425				28.968	

Tonnage Milled

Power conditions during 1935 were less favorable than during the previous year, resulting in a smaller percentage of full running time. Nevertheless a new record was established by milling 156,800 tons.

Recovery

The addition of one more agitator during the early part of the year resulted in a slight improvement in recovery, notwithstanding the sacrifice made in fineness of grinding. That sacrifice was considered warranted to offset tonnage lost through the effect of unfavorable power conditions.

Mill Equipment

A new 35 ft. Dorr Thickener was installed during the year and the installation of a third slime filter was commenced. The completion of this latter installation in January, 1936, is expected greatly to relieve operating difficulties at present experienced when milling is pushed to the extent of 14,000 tons a month.

The repairs desirable to effect in the mill during the dry season are of such a nature that a shut-down of several days may be necessary to effect them.

POWER

Rainfall	1935	1934
Total rainfall, inches	63.40	53.87
Number of rainy days	182	185
Greatest monthly rainfall, inches	16.29 (Oct.)	12.74 (May)
Lowest monthly rainfall, inches	.31 (March)	.55 (March)
Greatest single rainfall, inches	2.80 (Sept.)	2.19 (Oct.)

POWER DISTRIBUTION

	1935		1934	
	Kilowatt Hours	K.W. Hours Per Ton	Kilowatt Hours	K.W. Hours Per Ton
Ventilation	27,660	.176	14,715	.095
Mine Power	2,390,181	15.244	2,637,739	17.007
Electric Haulage	203,220	1.296	209,640	1.352
Blacksmithing	39,200	.250	37,400	.241
Mine Lights	33,400	.213	27,250	.176
Hoisting	15,529	.099	26,106	.168
Mill Power	5,599,010	35.708	5,803,893	37.420
Mill Lights	48,220	.308	47,300	.305
Surface Lights	452,130	2.884	530,423	3.420
Surface Power	97,870	.624	155,927	1.005
Machine Shop	125,200	.798	131,620	.849
Laboratory	32,300	.206	20,817	.134
Totals	9,063,920	57.806	9,642,830	62.172

Power Production by:		
San Juancito Plant	55.70%	51.80%
Guadalupe Plant	34.14%	32.13%
Aguacatal Plant	10.16%	16.07%
	100.00%	100.00%

COST OF POWER PRODUCTION

	1935			1934		
	Amount U.S.Cy.	Per Ton	K.W. Hour	Amount U.S.Cy	Per Ton	K.W. Hour
Labor	$12,724.07	.08115	.0014038	$10,858.64	.07001	.0011261
Supplies	4,345.13	.02771	.0004794	4,195.59	.02705	.0004351
Totals	$17,069.20	.10886	.0018832	$15,054.23	.09706	.0015612

Based on Horsepower Generated:

	1935	1934
Horsepower Hours	12,150,027	12,926,045
Cost per Horsepower Hour	$ 0.001405	$ 0.001165
Cost per Horsepower Year	$12.30780	$10.20540
Cost per Horsepower Year, Increase	$ 2.10240	

The slightly lower power output reflects the unfavorable weather conditions which obtained during the year 1935.

OTHER DEPARTMENTS

Medical Department

	1935	1934
Cost of maintenance	$ 9,279.95	$ 9,943.40
Total consultations, examinations and treatments	13,850	14,690

Assay Office and Laboratory

	1935	1934
Total number assays run	36,075	31,503
Average number of assays per day	99	86
Total cost	$ 8,091.51	$ 6,912.93
Cost per assay	.22	.22

Schools

	1935	1934
Average Daily Attendance During Year:		
Boys' School	125	127
Girls' School	135	121
Rosario Mixed School	31	61
La Reforma Mixed School	30	27
Rosario Foreign School	10	8
Total expense—native schools	$10,732.43	$10,531.03
Total expense—Rosario foreign school	2,397.05	2,282.41
Total expense—native and foreign schools	$13,129.48	$12,813.44
Increase	$ 316.04	

A new double school-house was erected in San Juancito during 1935, constructed of adobe brick, plastered inside and out, and with cement tile floors. The building consists of 18 rooms and accommodates both girls' and boys' departments.

The school maintained during the past two years in the small settlement of La Reforma, not far from San Juancito, has been located in a rented house which will not be available for the school year 1936. It is planned, therefore, to construct a small school-house in that settlement.

Police and Garrison

	1935	1934
Total maintenance expense	$16,718.80	$16,261.60
Increase	457.20	

Hotel

	1935	1934
Total number of meals served	28,873	31,345
Total cost	$16,039.98	$16,485.40
Cost per meal	.556	.526

Roads

	1935	1934
Total maintenance	$ 7,180.22	$ 8,825.20
Decrease	1,644.98	

The heavy rainfalls and excessive amount of cart freight traffic the latter part of 1935, caused abnormal damage to the road between Tegucigalpa and San Juancito. Road expenditures early in the year will therefore be relatively high but for the entire year should not be abnormal, perhaps somewhat above those of 1935.

Agencies

	1935	1934
Total expense	$ 3,830.78	$ 3,715.54
Increase	115.24	

EXPANSION

Small expenditures were made on four mining prospects in Honduras. None of these responded favorably and at the end of the year there were no mining properties under consideration in Honduras.

An option taken upon the San Albino Mine in Nicaragua early in the year was dropped in the month of September. Options have been taken jointly with some other companies upon other gold properties in Nicaragua which are now being investigated.

CONCLUSION

The management takes pleasure in commending its entire local staff for its individual efforts and loyal support throughout the year just closed.

This opportunity is taken to express also our sincere appreciation of the valuable and indispensable assistance and collaboration rendered by the Officers and Directors of the Company.

Respectfully submitted,

K. H. MATHESON,
General Manager.

Annex "A"
Active Ore Reserves

ESTIMATED RESERVES (13 and 14 cu. ft. per ton) Veins	Av. width, feet Vein	Waste	Stoping	Tons of ore plus waste	Av. Troy ounces per ton Ag.	Au.	Total Troy ounces Ag.	Au.
Independencia Group								
Independencia	1.95	2.52	4.47	12,089	20.	.09	247,310	1,127
San Blas	.93	2.07	3.00	2,900	18.	.03	52,200	87
Salvador Group								
Salvador	2.16	1.94	4.10	40,121	31.	.12	1,257,666	4,733
Jucuara No. 1—Fortuna	2.62	1.65	4.27	206,886	29.	.07	5,917,574	13,820
Fortuna North	1.52	1.85	3.37	2,892	14.	.02	40,187	44
Fortuna Vein	1.50	1.50	3.00	2,725	33.	.07	89,541	183
Jucuara Group								
Jucuara No. 2	3.38	2.39	5.77	88,692	29.	.28	2,567,958	24,652
Jucuara No. 3	1.78	1.84	3.62	23,997	14.	.30	344,837	7,099
Jucuara No. 4	2.77	1.53	4.30	34,883	32.	.11	1,133,225	3,848
Jucuara No. 5	2.18	1.99	4.17	6,005	15.	.10	90,118	613
56 Fault Vein	2.02	2.35	4.37	3,560	19.	.21	68,182	746
Santa Fe Group								
Sante Fe No. 1	2.27	2.73	5.00	1,877	22.	.10	40,896	187
No. 2	2.97	2.63	5.60	55,961	50.	.55	2,812,912	30,748
No. 3	1.86	2.45	4.31	25,816	24.	.25	625,887	6,545
San Benito No. 1	1.11	2.19	3.30	9,340	21.	.31	194,592	2,915
San Benito No. 2	1.68	1.32	3.00	7,186	31.	.31	224,957	2,214
Old Mine Group								
San Joaquin	1.18	1.82	3.00	9,381	10.	.23	93,191	2,187
Colonia	1.08	2.04	3.12	9,990	14.	.12	138,319	1,208
Capitana	.73	2.27	3.00	5,192	6.	.24	28,809	1,227
Other Veins								
Veta No. 4 South	1.39	1.61	3.00	5,446	19.	.02	102,040	133
Santa Gertrudis	.94	2.06	3.00	6,300	20.	.04	126,000	252
Total				561,239	28.86	.1863	16,196,401	104,568

BROKEN ORE IN STOPES (21 cu. ft. per ton) Veins	
Independencia	7,162
Salvador	13,232
Jucuara No. 1—Fortuna	2,823
Santa Fe No. 2	8,136
Santa Fe No. 3	900
Jucuara No. 3	2,580
Fortuna—North	3,273
San Benito No. 1	3,751
Colonia	1,413
Capitana	301
Mine Storage Chutes	697
Ore Mill Bin	635
Total	44,903

Summary—Active Reserves

Estimated Ore at 13 and 14 cu. ft. per ton	561,239	28.86	.1863	16,196,401	104,568
Broken Ore in Stopes at 21 cu. ft. per ton	44,903	28.61	.1447	1,285,000	6,500
TOTAL ACTIVE RESERVES AS OF JANUARY 1, 1936	606,142	28.84	.1832	17,481,401	111,068

Annex "B"
Inactive Ore Reserves

ESTIMATED RESERVES
(13 cu. ft. per ton)
Veins

	Tons of ore plus waste	Ounces per ton Ag.	Au.	Total ounces Ag.	Au.
Esperanza (South San Miguel Extension South)	5,450	14.	.04	76,300	218
Porvenir	1,142	11.	.03	12,741	29
Nuevo	8,450	9.	.11	76,050	929
Southwest	10,500	16.	.03	168,000	315
Veta No. 4—North	3,000	12.	.03	36,000	90
Carmen	10,000	16.	.03	160,000	300
TOTAL INACTIVE RESERVES AS OF JAN. 1, 1936	38,542	13.73	.0488	529,091	1,881

Annex "C"
Exploration and Development for the Year 1935

Veins and Groups	Drifts	Cross-cuts	Raises	Winzes	Total Feet
Independencia Group					
Independencia	30.	30.	292.	..	352.
San Blas	754.	31.	....	..	785.
Salvador Group					
Salvador	929.5	324.	298.	..	1,551.5
Jucuara No. 1 (Fortuna)	3,510.	1,668.5	2,829.	..	8,007.5
Fortuna	254.	.....	....	..	254.
Jucuara Group					
Jucuara No. 2	1,774.	513.	571.	..	2,858.
Jucuara No. 3	1,343.	67.	801.	..	2,211.
Jucuara No. 4	709.5	324.	706.	..	1,739.5
Jucuara No. 5	67.	....	75.	..	142.
Santa Fe Group					
Santa Fe No. 1	181.	....	9.	..	190.
Santa Fe No. 2	1,627.	712.	124.	..	2,463.
Santa Fe No. 3	1,192.	163.	576.	..	1,931.
San Benito No. 1	1,213.	175.	371.	..	1,759.
San Benito No. 2	571.	58.	234.	..	863.
Old Mine Group					
Capitana	315.	....	185.	..	500.
Colonia	591.	80.	78.	..	749.
San Joaquin	....	34.	240.	..	274.
Southwest	93.	....	....	..	93.
South San Miguel	....	19.	....	..	19.
Northwest	....	....	43.	..	43.
Culebra	....	....	21.	..	21.
Other Veins					
Carmen No. 2	753.	12.	16.	..	781.
Santa Gertrudis No. 2	690.5	67.	102.	..	859.5
Veta No. 4	563.5	81.	9.	..	653.5
Porvenir	133.	176.	....	....	309.
Esperanza Cross-cuts					
Upper 150 Level	....	149.	....	..	149.
Lower 400 Level	....	2,146.	....	67	2,213.
Jucuara Cross-cuts					
Upper 150 Level	....	899.	....	..	899.
Lower 300 Level	....	593.	....	..	593.
Other Cross-cuts					
West Cross-cut	21.	863.	....	..	884.
Station Cross-cuts					
Upper 250 Level	....	65.	....	..	65.
Upper 150 Level	....	153.	....	..	153.
Lower 400 Level	....	331.	....	..	331.
Lower 650 Level	....	250.	....	..	250.
TOTALS	17,315.	9,983.5	7,580.	67	34,945.5

ORE PRODUCTION

Annex "D"

From Stoping Operations: Veins	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Independencia Group													
Independencia	1,054	1,067	1,918	1,175	1,329	1,954	1,804	2,213	2,052	1,986	1,657	1,477	19,686
Salvador Group													
Salvador	5,222	4,744	2,976	3,409	3,129	3,500	3,981	3,237	2,182	2,059	2,587	2,601	39,627
Jucuara No. 1 (Fortuna)	888	955	881	1,461	1,006	507	1,410	1,438	389	1,713	2,107	2,710	15,465
Fortuna North	.....	.....	.....	137	323	415	314	225	363	889	1,002	1,395	5,063
Jucuara Group													
Jucuara No. 2	.....	.....	37	.....	78	80	158	110	77	30	76	21	667
Jucuara No. 3	98	41	150	131	104	75	158	194	246	224	340	409	2,170
Jucuara No. 4	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	3
Santa Fe Group													
Santa Fe No. 1	805	149	224	239	322	282	302	125	38	.....	.....	.....	2,486
Santa Fe No. 2	31	194	.....	.....	11	.....	122	246	387	109	120	272	1,492
Santa Fe No. 3	252	363	428	355	353	346	280	332	477	823	643	187	4,839
San Benito No. 1	125	54	312	359	348	355	294	722	1,282	827	514	885	6,077
Old Mine Group													
Capitana	70	81	386	411	368	270	.....	12	129	73	678	151	2,629
San Joaquin	117	224	491	303	85	10	16	.....	.....	.....	25	.....	1,271
Colonia	19	102	139	154	196	156	127	95	307	207	536	286	2,324
Old Fills	336	153	.....	.....	15	192	325	147	89	109	174	151	1,691
Miscellaneous Group													
Carmen No. 2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58	.....	58
STOPING TOTALS	9,017	8,127	7,942	8,134	7,670	8,142	9,291	9,096	8,018	9,049	10,517	10,545	105,548

From Development Operations:

Veins	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Independencia Group													
Independencia	.....	.....	.....	.....	58	138	277	265	140	10	.....	.....	888
San Blas	.....	59	209	94	.....	39	39	155	16	114	104	242	1,071
Salvador Group													
Salvador	123	244	39	273	348	340	233	378	533	386	246	421	3,564
Jucuara No. 1 (Fortuna)	1,425	1,081	1,089	843	678	767	533	485	1,112	1,360	642	667	10,682
Fortuna North	.....	.....	.....	.....	144	170	.....	.....	.....	59	.....	.....	373
Jucuara Group													
Jucuara No. 2	342	369	424	427	431	593	682	738	948	1,080	872	806	7,712
Jucuara No. 3	723	647	528	334	314	516	353	507	464	237	42	.....	4,665
Jucuara No. 4	287	89	411	65	204	210	290	138	165	441	249	140	2,689
Jucuara No. 5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	108	108
Santa Fe Group													
Santa Fe No. 1	161	53	112	.....	.....	18	10	.....	.....	.....	.....	.....	354
Santa Fe No. 2	209	473	762	429	388	302	216	496	618	490	201	100	4,684
Santa Fe No. 3	377	363	508	241	134	211	198	158	270	295	228	.....	2,983
San Benito No. 1	283	356	254	312	383	481	516	678	189	64	196	34	3,746
San Benito No. 2	.....	.....	37	114	206	192	107	65	95	138	93	204	1,251
Old Mine Group													
Capitana	18	219	.....	76	38	100	275	17	13	.....	.....	.....	756
San Joaquin	.....	.....	.....	.....	.....	11	118	175	22	164	207	114	811
Colonia	.....	.....	395	230	21	29	31	101	87	112	.....	151	1,157
Northwest	.....	.....	.....	.....	.....	.....	.....	.....	58	.....	.....	.....	58
Southwest	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	348	348
Miscellaneous													
Veta No. 4	68	297	305	103	49	106	2	75	89	84	79	62	1,319
Carmen No. 2	5	84	310	85	309	.....	.....	144	100	10	.....	.....	1,047
Porvenir	.....	.....	.....	.....	.....	.....	.....	.....	.....	67	61	5	133
Santa Gertrudis No. 2	.....	148	249	114	.....	209	65	44	.....	.....	76	23	928
DEVELOPMENT TOTALS	4,021	4,482	5,632	3,740	3,705	4,432	3,945	4,619	4,919	5,111	3,296	3,425	51,327
STOPING TOTALS	9,017	8,127	7,942	8,134	7,670	8,142	9,291	9,096	8,018	9,049	10,517	10,545	105,548
GRAND TOTALS	13,038	12,609	13,574	11,874	11,375	12,574	13,236	13,715	12,937	14,160	13,813	13,970	156,875

Annex "E"

TONNAGE MINED

From October 1, 1907, to January 1, 1936

	Total including Stoping, Devel. & Filling Oct. 1, 1907, to Dec. 31, 1934	Total including Stoping, Devel. and Filling Year 1935	Grand total including Stoping, Devel. and Filling Jan. 1, 1936
Buena Ventura	98,490	.....	98,490
Candelaria Group	166,573	.....	166,573
Capitana	56,349	3,385	59,734
Carmen No. 1	18,365	.....	18,365
Carmen No. 2	.....	1,105	1,105
Catalina	6,587	.....	6,587
Colonia	56,438	3,481	59,919
Concepción	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	106,245	.....	106,245
Esperanza	8,710	.....	8,710
Fortuna Group	84,875	5,436	90,311
Guadalupe	61,177	.....	61,177
Independencia	235,676	20,574	256,250
Jucuara No. 1 (Fortuna)	50,867	26,147	77,014
Jucuara No. 2	29,355	8,379	37,734
Jucuara No. 3	5,239	6,835	12,074
Jucuara No. 4	2,518	2,692	5,210
Jucuara No. 5	.....	108	108
North	4,647	.....	4,647
Northwest	89,320	58	89,378
Nueva	28,147	.....	28,147
Porvenir	1,711	133	1,844
Rosario	150,915	.....	150,915
Salvador	485,239	43,191	528,430
San Benito No. 1	75,090	9,823	84,913
San Benito No. 2	.....	1,251	1,251
San Blas	5,052	1,071	6,123
San Joaquin	63,380	2,082	65,462
San Luis	2,389	.....	2,389
San Miguel North	174,801	.....	174,801
San Miguel Group	125,842	.....	125,842
Santa Fe No. 1	182,298	2,840	185,138
Santa Fe No. 2	5,969	6,176	12,145
Santa Fe No. 3	7,718	7,822	15,540
Santa Gertrudis No. 1	30,789	.....	30,789
Santa Gertrudis No. 2	.....	928	928
Socorro	22,592	.....	22,592
Southwest	20,509	348	20,857
Termópilas	1,094	.....	1,094
West	97,005	.....	97,005
Veta No. 4 North	8,323	.....	8,323
Veta No. 4 South	.....	1,319	1,319
Ore from Development	63,599	.....	63,599
Miscellaneous	3,379	1,691	5,070
TOTALS	2,663,852	156,875	2,820,727

Summary

From October 1, 1907, to January 1, 1936

From Stoping	2,177,744
From Development	407,892
From Fills	235,091
TOTAL	2,820,727

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NEW YORK and HONDURAS ROSARIO MINING COMPANY



FIFTY-SIXTH ANNUAL REPORT

NINETEEN HUNDRED AND THIRTY-SIX

REPORT of the
NEW YORK and HONDURAS
ROSARIO MINING COMPANY

NEW YORK

JANUARY 1, 1937

OFFICERS

WM. A. PRENDERGAST, *President*

H. A. GUESS, *Vice-President*

W. C. LANGLEY, *Treasurer*

J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

LEWIS L. CLARKE, *Chairman*
H. A. GUESS
IRVING HEIDELL
DR. J. RALPH JACOBY
HERBERT A. KAUFMANN
W. C. LANGLEY
LESTER S. OPPENHEIMER
WM. A. PRENDERGAST
M. F. SOTO
AMBROSE G. TODD
RICHARD H. VALENTINE

EXECUTIVE COMMITTEE

LEWIS L. CLARKE, *Chairman*
H. A. GUESS
IRVING HEIDELL
DR. J. RALPH JACOBY
M. F. SOTO
AMBROSE G. TODD
WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

PRESIDENT'S REPORT

February 15, 1937.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company:

This is the Fifty-sixth Annual Report of the Company, and covers the year 1936.

A consideration of the financial record, and the physical condition of your property, herein set forth, will reveal that we have passed another successful yearly period in the Company's history. The price of silver has been maintained throughout 1936 at a figure which has enabled us to achieve the satisfactory results explained in this report. Any discussion of the governmental policies and economic trends which now influence the "silver market" would seem unnecessary, as they would have to be approached from the aspect of pure theory and speculative opinion, and from which no comprehensive judgment may be derived.

It is with great pleasure that we convey to the Government and people of Honduras our whole-hearted congratulations on their continued prosperity, and our sincere gratitude for the friendly relations that have existed between them and this Company.

In discussing the financial elements of this report, I am following the formula used heretofore.

Silver production during 1936 was:
3,104,506$^{94}/_{100}$ ounces, compared with
2,641,345$^{50}/_{100}$ ounces, in 1935, an increase of
463,161$^{44}/_{100}$ ounces.

Gold production for 1936 was:
17,981$^{520}/_{1000}$ ounces, compared with
12,273$^{554}/_{1000}$ ounces in 1935, an increase of
5,707$^{966}/_{1000}$ ounces.

The average cost per ounce for producing silver in 1936 was $.21263, compared with $.30302 in 1935, a decrease of $.09039.

The average price obtained in 1936 for silver was $.45338, compared with $.63590, a decrease of $.18252.

The average price obtained for our gold production in 1936 was $35.0179 per ounce, compared with $35.0083, an increase of $.0096.

Our Operating Expenses in 1936 were $1,129,163.91, compared with $1,079,671.37, an increase of $49,492.54.

The New York Administration and General Expenses in 1936 were $77,117.16, compared with $75,006.78, an increase of $2,110.38.

The Net Profit for 1936 carried to Surplus was $768,243.64, compared with $850,377.56 in 1935, a decrease of $82,133.92. This reduction was principally due to the fall in the price of silver, but the result is slightly better than that of 1934 ($761,459.76) when the average price realized for silver was $.48856, or $.03518 more than we secured last year.

We have paid in dividends from earnings for the year 1936, $734,631.30, or $3.90 per share, compared with $800,559.75 for 1935, or $4.25 per share, a decrease of $65,928.45, or $.35 per share.

The earnings per share in 1936 were $4.078, compared with $4.51447 in 1935, a reduction of $.43647.

Our Income from Investments and sundry items in 1936 was $101,215.94, compared with $136,569.64 in 1935, a decrease of $35,353.70. This difference is accounted for principally by the receipt in 1935 of an arrearage of Preferred Stock dividends. In view of the reconstitution of our holdings, and necessarily in lower interest-bearing securities, our income from investments in 1937 will probably be lower than in 1936, unless some additional receipts from deferred dividends on certain Preferred Stocks are realized.

Our Gross Income (Operations and Investments, etc.) was $848,625.17, of which "Operations" contributed 88.073%, and "Investments" 11.927%.

The Surplus on December 31, 1936 was.....$2,241,425.74,
compared with $2,142,220.21

at December 31, 1935, an increase of.....$ 99,205.53,

which is accounted for by appreciation of the values of the securities owned by the Company.

The cost of the securities held by the Company on December 31, 1936, (exclusive of its own stock) was $1,991,850.84, and the market value as of that date computed by our auditors was $1,868,747.52, or a difference of $6\frac{18}{100}\%$.

As shown in the "Surplus Account" Statement, page 10, the Company expended on Expansion propositions it held exclusively,

the sum of $17,807.84. These have now been abandoned. There was also expended by us to December 31, 1936, on options on properties in Nicaragua, held with other companies, the sum of $98,924.69, of which $28,998.01 represents our interest in a first mortgage on these properties, a capital item as set forth in the Balance Sheet, pages 8—9.

There is submitted with this report and made a part hereof:

1. A Comparative Statement of Operations for the years 1936 and 1935;

2. A Comparative Income and Profit and Loss Statement for the years ended December 31, 1936, and December 31, 1935;

3. A Balance Sheet for the year ended December 31, 1936;

4. A Statement of the Surplus Account for the year ended December 31, 1936;

5. A list of the Securities held by this Company December 31, 1936;

6. A Table showing Bullion Production and Dividend Distribution to Stockholders from the organization of the Company, including all the dividends paid from the earnings of the year 1936.

Respectfully submitted,

WM. A. PRENDERGAST,
President.

Comparative Statement of Operations
For the Years 1936 and 1935

For the purpose of comparison, we show as follows, details pertaining to mine production and operation during the past two years.

	Year 1936	Year 1935	Increase *Decrease
Total Sales Value of Gold and Silver Recovered	$2,037,208.11	$2,109,313.47	*$72,105.36
Tons of Ore Milled	166,800	156,800	10,000
Ounces of Silver Recovered	3,104.506.94	2,641,345.50	463,161.44
Number of Ounces of Silver Recovered per Ton of Ore	18.61215	16.84532	1.76683
Ounces of Gold Recovered	17,981.520	12,273.554	5,707.966
Number of ounces of gold Recovered per ton of ore	.10780	.07828	.02952
Sales Value of Silver Recovered	$1,407,532.07	$1,679,637.45	*$272,105.38
Average Sales Value of Silver per Ounce	$ .45338	$ .63590	$ *.18252
Average cost of silver per Ounce	$ .21263	$ .30302	$ *.09039
Average profit on silver per ounce	$ .24075	$ .33288	$ *.09213
Total Sales Value of Gold Recovered	$629,676.04	$429,676.02	$200,000.02
Average Sales Value of Gold per Ounce	$ 35.0179	$ 35.0083	$ .0096
Value of Silver Recovered per ton of ore	$ 8.4385	$ 10.7120	$ *2.2735
Average Cost of Silver Per Ton of Ore	$ 3.9576	$ 5.1046	$ *1.1470
Average Profit on Silver Recovered Per Ton of Ore	$ 4.4809	$ 5.6074	$ *1.1265
Value of Gold Recovered Per Ton of Ore	$ 3.7750	$ 2.7403	$ 1.0347
Number of Bars of Bullion Shipped from Mine	1,867.	1,616.	251.

Income and Profit and Loss Statement
For the Years Ended Dec. 31, 1936 and Dec. 31, 1935

	Year 1936	Year 1935	Increase * Decrease
Production of Gold and Silver	$2,037,208.11	$2,109.313.47	*$72,105.36
Less: Freight and Expenses on Bullion	83,517.81	75,395.77	8,122.04
Operating Income	1,953,690.30	2,033,917.70	*80,227.40
Deduct: Operating Expenses	1,129,163.91	1,079,671.37	49,492.54
Operating Profit	824,526.39	954,246.33	*129,719.94
Deduct: New York Administrative and General Expenses	77,117.16	75,006.78	2,110.38
Net Profit from Operations	747,409.23	879,239.55	*131,830.32
Add: Income from Investments, etc.	101,215.94	136,569.64	*35,353.70
Totals	848,625.17	1,015,809.19	*167,184.02
Less: Other Deductions from Income (Note A)	10,442.22	78,414.70	*67,972.48
Net Profit Before Federal Income Tax and Provision for Depletion	838,182.95	937,394.49	*99,211.54
Deduct: Federal Income Tax	67,473.65	77,528.91	*10,055.26
Net Profit for Year	770,709.30	859,865.58	*89,156.28
Appropriated for Depletion from Earnings (Note B)	2,465.66	9,488.02	*7,022.36
Net Profit for Year Carried to Surplus	$ 768,243.64	$ 850,377.56	*$82,133.92

Note "A": Other deductions from Income include:			
Expansion expenses (Note C)	.....	$ 54,295.56	*$54,295.56
Federal Capital Stock Tax and N. Y. State Franchise Tax	5,320.85	8,604.11	*3,283.26
Loss on Securities Sold—net	.....	7,284.94	*7,284.94
Amortization of Premium Paid on United States Securities	3,263.66	1,02558	2,238.08
Special Legal Expenses	.....	5,035.81	*5,035.81
Sundry Items	1,857.71	2,168.70	*310.99
	$ 10,442.22	$ 78,414.70	*$67,972.48

NOTE "B": Beginning with the year 1932, depletion has been taken in tax returns on a percentage basis in accordance with the Revenue Act of 1932. Entries recording depletion as they affect the older portion of the property are still carried in the general accounts. Depletion deductions on ore mined from the newer discoveries are made for income tax purposes only. No provision is required for Federal surtax on undistributed profits, as dividends paid in 1936 are in excess of adjusted taxable net income for the year.

NOTE "C": Expenditures during 1936 in the net sum of $87,734.52 for investigations of outside properties have been charged to earned surplus.

BALANC

AS OF DECE

ASSETS

Permanent—			
Mines, Real Estate & Concessions	$3,000,000.00		
Less: Allowance for Depletion of Mines	2,179,713.15	$ 820,286.85	
Buildings, machinery and Equipment	1,996,516.51		
Less: Allowance for Depreciation	1,540,216.09	456,300.42	$1,276,587.27
Current—			
Cash		158,193.84	
Bullion at smelters and in Transit—Less: Allowance for Expenses		278,422.52	
Accounts Receivable		81,844.18	
Broken ore in stopes and mill bins (at cost)		186,159.00	
Inventories—Materials and supplies (at cost)		228,050.34	
U. S. Government and Other Marketable Securities (at cost, less amortization of Premium Paid on Government Securities)	1,991,850.84		
Less: Provision to Adjust to Market Values	123,103.32		
	1,868,747.52		
Accrued Interest	8,961.51	1,877,709.03	2,810,378.91
Other Assets—			
Sundry Accounts Receivable		5,029.46	
Loans and Advances—Government of Honduras and Municipalities		23,435.60	
Interest on First Mortgage on Properties in Nicaragua		28,998.01	57,463.07
Deferred Charges—			
Supplies, Prepaid Expenses, Unexpired Insurance Premiums, etc.			157,150.70
			$4,301,579.95

E SHEET

MBER 31, 1936

LIABILITIES

Current—				
Accounts Payable			$ 57,764.41	
Drafts Payable			46,608.15	
Federal Taxes—1936			72,111.65	176,484.21
Capital—				
Capital Stock (Par $10 per share)				
Authorized and Issued—				
	200,000 Shares	$2,000,000.00		
Less: In Treasury—				
	11,633 Shares	116,330.00		
Outstanding	188,367 Shares		1,883,670.00	
Surplus—				
Earned		1,679,999.44		
Appreciation of				
Mines	$1,500,000.00			
Less: Depletion				
Earned	938,573.70	561,426.30	2,241,425.74	4,125,095.74
				$4,301,579.95

Analysis of Surplus

For the Year ended December 31, 1936

EARNED SURPLUS

Balance—December 31, 1935—Per Former Report			$1,578,328.25
ADDITIONS			
Net earnings for the year after provision for Federal Taxes, per Statement of Income and Expenses		$768,243.64	
Restoring to Earned Surplus Portion of Reserve previously provided to adjust book value of marketable securities to market value, not required at December 31, 1936 because of increase in quoted value of securities by this amount during year		153,257.72	
Refund of prior year Income Taxes		2,535.65	924,037.01
			2,502,365.26
DEDUCTIONS			
Dividends paid, totaling $3.90 per share:			
April, 1936—$.75 per share	$141,275.25		
July, 1936—$.75 per share	141,275.25		
October, 1936—$.75 per share	141,275.25		
December, 1936—$1.65 per share	310,805.55	734,631.30	
Expenditures during 1936 for investigations of outside properties:			
On properties in which others have an interest	98,924.69		
Less: Amount capitalized, represented by interest in first mortgage	28,998.01		
	69,926.68		
On properties in which Company had exclusive interest	17,807.84	87,734.52	822,365.82
Balance—December 31, 1936—Per Balance Sheet			$1,679,999.44

SURPLUS FROM APPRECIATION OF MINES

Balance—December 31, 1935—Per Former Report	$ 563,891.96
Less: Allowance for depletion on appreciation of mine valuation	2,465.66
Balance—December 31, 1936—Per Balance Sheet	$ 561,426.30
Total Surplus—December 31, 1936	$2,241,425.74

Marketable Securities
December 31, 1936

U. S. Government Securities—	Par Value	
Treasury Bonds—3¼% due August 1, 1941	$ 50,000.00	
Treasury Bonds—3⅜% due June 15, 1943-1940	25,000.00	
Treasury Bonds—3⅜% due March 15, 1943-1941	25,000.00	
Treasury Bonds—3¼% due April 15, 1946-1944	100,000.00	
Treasury Bonds—3⅜% due June 15, 1947-1943	80,000.00	
Treasury Bonds—3⅛% due June 15, 1949-1946	50,000.00	
Treasury Bonds—2¾% due March 15, 1951-1948	50,000.00	
Treasury Bonds—2½% due Dec. 15, 1953-1949	75,000.00	
Treasury Bonds—2¾% due June 15, 1954-1951	50,000.00	
Treasury Bonds—2¾% due Sept. 15, 1959-1956	50,000.00	$555,000.00
Treasury Notes—2⅛% due June 15, 1939	75,000.00	
Treasury Notes—1⅜% due December 15, 1939	75,000.00	
Treasury Notes—1⅝% due March 15, 1940	50,000.00	
Treasury Notes—1½% due June 15, 1940	25,000.00	
Treasury Notes—1½% due December 15, 1940	50,000.00	
Treasury Notes—1½% due March 15, 1941	50,000.00	325,000.00
New York State Bonds—		
Elimination of Grade Crossings—3%—due July 1937	10,000.00	
Emergency Unemployment Relief—2¾%—due July 1, 1938	10,000.00	
Emergency Unemployment Relief—2¾%—due July 1, 1939	10,000.00	
Emergency Unemployment Relief—2¾%—due July 1, 1940	10,000.00	
General State Improvements—3%—due July 1, 1941	10,000.00	50,000.00
Railroad Bonds—		
Chicago and Northwestern Railway Co. 1st and and Ref. Mtge. 4½% Series "C"—due May 1, 2037	25,000.00	
Chicago, Rock Island and Pacific R.R.—1st and Ref. Mtge. 4%—due April 1, 1934	50,000.00	
New Orleans, Texas and Mexico Railway—1st Series "A"—5½%—due April 1, 1954	25,000.00	
New York, Chicago and St. Louis R.R. Co.—Ref. Mtge. Series "C"—4½%—due Sept. 1, 1978	50,000.00	
St. Louis and San Francisco Railway—Prior Lien Mtge. Bonds, Series "B"—5%—due July 1, 1950	50,000.00	200,000.0

Public Utility Bonds—

Birmingham Gas. Co.—Gold Notes—6%—due October 1, 1938	50,000.00	
Brooklyn Manhattan Transit Corp., Rapid Transit Collateral Trust—4½%—due May, 1, 1966	50,000.00	
Electric Power and Light Corp.—Gold. Deb.—5%—due February 1, 2030	50,000.00	
Joplin Water Works Co. 1st Mtge.—5%—Gold Bonds Series "A"—due March 1, 1957	25,000.00	
Mississippi Power and Light Co.—1st Mtge.—5%—Gold Bonds—due Dec. 1, 1957	50,000.00	
National Power and Light Co.—5%—Gold Deb. Series "B"—due May 1, 2030	50,000.00	
West Penn Power Co.—1st Mtge. Bonds Series "I"—3½%—due January 1, 1966	50,000.00	$325,000.00

Stocks—	Number of Shares
American Chicle Co.—Common Stock—No Par	1,000
American Gas and Power Co.—Common Stock Par Value $1.00	800
American Gas and Power Co., Warrants for Subscription to Common Stock	400
American Smelting and Refining Co., 6% Cumulative Second Preferred Stock, Par Value $100.00	1,000
Arkansas Power and Light Co., $6.00 Cumulative Preferred Stock—No Par	500
Commonwealth and Southern Corp., $6.00 Cumulative Preferred Stock—No Par	550
Florida Power and Light Co., $7.00 Cumulative Preferred Stock—No Par	500
Home Insurance Co., Capital Stock—Par Value $5.00	600
Iowa Southern Utilities Co. of Delaware—7%—Cumulative Preferred Stock—Par Value $100.00	500
Jersey Central Power and Light Co.—5½%—Cumulative Preferred Stock—Par Value $100.00	500
Public Service Co. of Indiana, $7.00 Cumulative Prior Preferred Stock—No Par	500
West Penn Electric Co., 6% Cumulative Preferred Stock—Par Value $100.00	290

Market Value—December 31, 1936 ..... $1,868,747.52

Report of Auditors

February 19, 1937

Board of Directors,

New York and Honduras Rosario Mining Company:

Gentlemen:

We have made an examination of the balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY — NEW YORK CITY as at December 31, 1936, and of the statements of income and surplus for the year ended on that date. In connection therewith, we examined or tested accounting records of the Company and other supporting evidence at the New York office including minutes of stockholders and directors meetings; we examined reports received from the mine office in Honduras, and also made a general review of the accounting methods and an audit of the operating and income accounts at the New York office for the year.

Cash, securities, and bullion were verified by actual count, inspection of certificates and documents, or by direct communication with depositories. Provision for depletion and depreciation, as in the past, represents the maximum amount permitted on book values under federal revenue acts.

The Company has charged to earned surplus account its 1936 expenditures for investigations of outside properties; in previous years expenditures for such purposes were charged to income account.

In our opinion, based upon our examination and information submitted to us, the accompanying balance sheet and related statements of income and surplus show the financial condition of the Company at December 31, 1936 and the results of its operation and changes in surplus for the year then ended. Further, the statements have been prepared in accordance with accepted accounting principles, and, with the exception of the above noted change with respect to charges for expenditures for investigations of outside properties, on a basis consistent with the preceding year.

Very truly yours,

ERNST & ERNST

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
1925	1,763,023.16
1926	1,601,429.35
1927	1,341,300.06
1928	1,500,233.98
1929	1,477,710.79
1930	1,315,821.38
1931	1,403,104.20
1932	1,355,117.43
1933	1,910,740.17
1934	1,965,520.68
1935	2,109,313.47
1936	2,037,208.11
	$54,208,530.94

Distribution to Stockholders

1887	No. 1	$ 37,500— 2½%	($ .25 per share) Dividend
1888	Nos. 2 to 8	112,500— 7½%	(.75 per share) Dividend
1889	Nos. 9 to 14	97,500— 6½%	(.65 per share) Dividend
1891	Nos. 15 to 17	45,000— 3%	(.30 per share) Dividend
1892	Nos. 18 to 22	187,500—12½%	(1.25 per share) Dividend
1893	Nos. 23 to 26	150,000—10%	(1.00 per share) Dividend
1896	Nos. 27 to 30	60,000— 4%	(.40 per share) Dividend
1897	Nos. 31 to 42	180,000—12%	(1.20 per share) Dividend
1898	Nos. 43 to 50	120,000— 8%	(.80 per share) Dividend
1899	Nos. 51 to 63	195,000—13%	(1.30 per share) Dividend
1900	Nos. 64 to 78	255,000—17%	(1.70 per share) Dividend
1901	Nos. 79 to 95	255,000—17%	(1.70 per share) Dividend
1902	Nos. 96 to 100	75,000— 5%	(.50 per share) Dividend
1903	No. 101	15,000— 1%	(.10 per share) Dividend
1904	Nos. 102 to 110	135,000— 9%	(.90 per share) Dividend
1905	Nos. 111 to 124	195,000—13%	(1.30 per share) Dividend
1906	Nos. 125 to 142	285,000—19%	(1.90 per share) Dividend
1907	Nos. 143 to 155	195,000—13%	(1.30 per share) Dividend
1908	Nos. 156 to 167	180,000—12%	(1.20 per share) Dividend
1909	Nos. 168 to 175	120,000— 8%	(.80 per share) Dividend
1910	Nos. 176 to 181	120,000— 8%	(.80 per share) Dividend
1911	No. 182	45,000— 3%	(.30 per share) Dividend
1912	Nos. 183 to 184	70,000— 3½%	(.35 per share) Dividend
1913	Nos. 185 to 189	220,000—11%	(1.10 per share) Dividend
1914	Nos. 190 to 194	260,000—13%	(1.30 per share) Dividend
1915	Nos. 195 to 199	280,000—14%	(1.40 per share) Dividend
1916	Nos. 200 to 207	400,000—20%	(2.00 per share) Dividend
1917	Nos. 208 to 212	260,000—13%	(1.30 per share) Dividend
1917	Nos. 1 and 2	140,000— 7%	(.70 per share) Amortization
1918	Nos. 213 to 216	200,000—10%	(1.00 per share) Dividend
1918	Nos. 3 to 6	200,000—10%	(1.00 per share) Amortization
1919	Nos. 217 to 220	200,000—10%	(1.00 per share) Dividend
1919	Nos. 7 to 10	200,000—10%	(1.00 per share) Amortization
1920	Nos. 221 to 226	320,000—16%	(1.60 per share) Dividend
1920	No. 11	40,000— 2%	(.20 per share) Amortization
1922	Nos. 227 to 230	200,000—10%	(1.00 per share) Dividend
1923	Nos. 231 to 235	250,000—12½%	(1.25 per share) Dividend
1924	Nos. 236 to 241	350,000—17½%	(1.75 per share) Dividend
1925	Nos. 242 to 249	400,000—20%	(2.00 per share) Dividend
1926	Nos. 250 to 257	400,000—20%	(2.00 per share) Dividend
1927	Nos. 258 to 265	400,000—20%	(2.00 per share) Dividend
1928	Nos. 266 to 274	450,000—22½%	(2.25 per share) Dividend
1929	Nos. 275 to 283	500,000—25%	(2.50 per share) Dividend
1930	Nos. 284 to 290	371,677—18¾%	(1.87½ per share) Dividend
1931	Nos. 291 to 297	364,159—18¾%	(1.87½ per share) Dividend
1932	Nos. 298 to 303	283,874—15%	(1.50 per share) Dividend
1933	Nos. 304 to 312	659,324—35%	(3.50 per share) Dividend
1934	Nos. 313 to 321	753,468—40%	(4.00 per share) Dividend
1935	Nos. 322 to 330	800,559—42½%	(4.25 per share) Dividend
1936	Nos. 331 to 337	734,632—39%	(3.90 per share) Dividend
		$12,767,694	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 284, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distribution, Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00
Dividends 285 to 337 inclusive, were paid on outstanding capital stock.

GENERAL MANAGER'S REPORT

January 1, 1937

To the Officers and Directors of the
New York & Honduras Rosario Mining Company,
120 Broadway,
New York, N. Y.

Gentlemen:

Data illustrating the physical condition of your property at the close of the year 1936 is herewith submitted, together with a résumé of the corporation's activities during the 56th year of continuous mining operations in Honduras.

Production

	1936	1935
Dry Tons Treated	166,800.	156,800.
Average Per Ton—Troy Ozs. Silver Milled at the Mine	20.3898	18.3868
Average Per Ton—Troy Ozs. Gold Milled at the Mine	.1125	.0833
Total Troy Ozs. Silver Milled at the Mine	3,401,024.	2,883,050.
Total Troy Ozs. Gold Milled at the Mine	18,765.	13,061.
Total Troy Ozs. Silver Produced at the Mine	3,104,174.	2,646,411.
Total Troy Ozs. Gold Produced at the Mine	17,878.	12,236.
Average Per Ton—Troy Ozs. Silver Produced at the Mine	18.6102	16.8776
Average Per Ton—Troy Ozs. Gold Produced at the Mine	.10718	.0780
Ratio of Gold to Silver	1:174	1:216
Bars of Doré Bullion	1,867.	1,616.
Bullion Fineness of Silver	964.67	975.66
Bullion Fineness of Gold	5.556	4.511
Custom Ore & Bullion—Not included above		
Troy Ozs. Silver	.....	762.49
Troy Ozs. Gold	512.1278	198.8053

166,800 tons of ore, averaging 20.39 ounces silver and .1125 ounces gold were milled, 10,000 tons more than the previous year, a record tonnage for this property.

The average price obtained in 1936 for silver, approximately 18 cents per ounce less than in 1935, necessitated mining slightly higher grade ore in order to establish satisfactory profits. Earnings were further enhanced by mining more heavily from higher gold bearing veins. It was possible to produce this record tonnage of better grade ore and at the same time increase ore reserves over those of the previous year.

As a policy for the year 1937, it is proposed to increase still further the annual gold production. Silver production will be largely governed by the price of that metal and local operating conditions. Somewhat higher bullion production than obtained in 1936 can be expected.

Honduras Operating Costs in U. S. Currency

YEAR — 1936		Total Costs		YEAR—1935	Total Costs	Cost Per Ton 1936	Cost Per Ton 1935	Cost Per Ounce of Silver 1936	Cost Per Ounce of Silver 1935
MINING									
Labor		$329,117.22		$330,840.61					
Supplies		246,324.99		235,829.34					
Power		5,892.70		5,196.70					
Depreciation, Etc.		9,244.05		8,869.17					
Ore Mined and Milled									
First of Year	$196,393.82		$186,068.87						
Last of Year	186,159.00	10,234.82	$600,813.78 196,393.82	Cr. 10,324.95	$570,410.87	$3.60	$3.64	$.1935	$.2159
MILLING									
Labor		69,835.66		64,773.22					
Supplies		200,242.46		175,746.54					
Power		11,579.67		10,526.65					
Depreciation, Etc.		39,982.24	$321.640.03	39,662.32	$290,708.73	$1.93	$1.85	$.1036	$.1100
ADMINISTRATION									
Labor and Supplies		179,466.36		192,432.28					
Depreciation, Etc.		12,243.74	$191,710.10	11,119.49	$203,551.77	$1.15	$1.30	$.0618	$.0771
			$1,114,163.91		$1,064,671.37	$6.68	$6.79	$.3589	$.4030
Mine Yearly Concession Expense			15,000.00		15,000.00	.09	.09	.0048	.0057
			$1,129,163.91		$1,079,671.37	6.77	6.88	.3637	.4087
Credit for Gold			629,676.04		429,676.02	3.77	2.74	.2028	.1626
Net Cost of Silver			$ 499,487.87		$ 649,995.35	$3.00	$4.14	$.1609	$.2461

Honduras Operating Costs

Total operating costs show an increase of $49,492.54 over those of 1935. This is attributable to the greater tonnage of higher grade ore mined and milled during the year.

The cost per ton on the other hand, shows a decrease of $0.11, due to the greater tonnage handled.

While per ton mining costs for 1936 show a slight decrease, an increase in 1937 is anticipated. It is proposed to increase stoping in the good gold bearing Santa Fe section. Santa Fe veins in general are narrow, of good grade, but walls as well as the veins themselves are much above average in hardness. Stoping costs, therefore, can be expected to rise appreciably, depending upon the intensiveness of stoping in that section.

Milling costs per ton show an increase. Factors contributing to this increase comprise a larger outlay for repairs to mill buildings, and an increase in total cyanide and zinc dust consumption, the natural result of treating higher grade ore.

Per ton Administration costs show a substantial decrease, resulting from the greater tonnage treated, with a more or less fixed total Administration cost. Supplementing that factor, the total Administration cost was reduced, particularly in the items of Surface Work, Water and Fire System, and Surface Engineering. Resurveying and remonumenting of mineral and surface lands was largely completed in the previous year, as also the renovation of the surface Water and Fire System.

THE MINE

Ore Reserves

The comparative summary of Active Ore Reserves, as of January 1, 1937, and as of January 1, 1936, appears immediately below:

Comparative Summary—Active Ore Reserves

	Tons of Ore Plus Waste	Av. Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
January 1, 1937	649,922	29.18	.1972	18,962,858	128,172
January 1, 1936	606,142	28.84	.1832	17,481,401	111,068
Increase	43,780	.34	.0140	1,481,451	17,104

Reserves are based on silver at 40 cents and gold at $35.00 per Troy ounce.

This very satisfactory increase of 1,481,457 ounces silver and 17,104 ounces of gold, is not to be attributed to the discovery of any large new veins, but to the continued development of already known ones and the intensive development of smaller veins branching from main ore bodies.

Particular attention is called to the increase in gold reserves. This increase has developed largely in the Jucuara No. 2 vein and in the very interesting network of relatively high grade gold veins in the Santa Fe section.

Comparative Summary—Inactive Ore Reserves

	Tons of Ore Plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1937	39,488	13.76	.0482	543,539	1,905
January 1, 1936	38,542	13.73	.0488	529,091	1,881
Increase	946	.03		14,448	24

Ore Production

	1936	1935	1934	1933	
By Stoping	121,996	105,548	98,655	102,471	tons
From Development Excavations	44,802	51,327	56,330	44,880	"
Total	166,798	156,875	154,985	147,351	"
Development Feet Driven	29,523	34,945.5	31,837	25,574	"

The source of ore production during the year is shown in Annex "D".

In line with the prediction in last year's report that development would probably produce less ore in 1936 than in the previous year, final figures show 26.8% of our tonnage production coming from development compared to 32.7% in 1935.

Indications at the time of writing this report are that development during the present year should produce fully as much ore as in the year under review.

The following table shows the comparison of daily labor employed in each department:

Average Number of Men Per Day

	1936	1935	
Number of days	366	365	
Mine	577.16	577.07	Men
Mill	71.78	72.22	"
Administration	27.86	35.49	"
Surface and Construction	62.76	109.96	"
Hotel	5.00	5.00	"
Laboratory	2.17	2.85	"
Electrical	40.78	38.42	"
Mechanical	31.83	35.18	"
Police, San Juancito	27.08	33.00	"
Police, Rosario	20.00	20.00	"
Totals	866.42	929.19	"

Exploration, Development and Mining

Annex "C" shows in detail the total exploration and development footage during 1936 as summarized in the following table:

Year	Drifts	Cross-cuts	Raises	Winzes	Total
1936	14,072	9,020	6,317	114	29,523 feet
1935	17,315	9,983.5	7,580	67	34,945.5 "

Practically the same amount of exploration crosscutting was done in 1936 as in the previous year, namely: 5,000 feet. It had been planned to do considerably more exploration. It was impossible to carry out this plan on account of loose ground conditions retarding progress in some of our main exploration cross-

cuts. It is planned to increase still further exploration work during 1937.

Although a large amount of vein development was done, as represented by the 14,072 feet of drifting, sufficient vein development faces were not available to equal the 1935 figures.

Development prospects at the beginning of 1937 are more favorable than they were a year ago.

Operating Crosscuts and Raises
Below the Peña Blanca Level

Ore developments in the Santa Fe section warrant continuation of the main Santa Fe ore pass, known as No. 8, to at least the Lower 300 ft. level. This work has already been started from the Lower 400. Indications are that it may be necessary to continue it to the Lower 200, although that level has economical access to the old ore pass No. 4 at the junction of the San Benito vein and the Lower 200 Esperanza crosscut. Development on the newer Santa Fe veins on this level will determine the need of an additional ore pass.

The increasing activity in this section of the mine combined with the remoteness of the Santa Fe ore bodies from the old Esperanza material handling cage No. 1, points to the need in the near future of a separate material handling raise for this section of the mine. This is now under consideration and work on it will probably be started in 1937.

Operating crosscuts from the Santa Fe ore pass No. 8 on the Santa Fe No. 2 vein have been completed on the Lower 400 and Lower 300 ft. levels to give ready access to the various veins now being developed between the Santa Fe No. 2 and Independencia veins. Operating and exploration crosscuts are also being driven on the Lower 500 ft. level in this same section. Before the end of 1937, it will be necessary also to complete short operating crosscuts on the Lower 200 ft. level.

The Jucuara material raise was completed during the year between the Peña Blanca or Upper 150 level and the mill haulage or Lower 650 level.

An operating crosscut 300 feet long was completed during the year on the Lower 500 ft. level from the Jucuara ore pass No. 6 and cage station to the Jucuara No. 2 vein, to permit of active development of this vein on that level.

Operating Crosscuts and Raises Above the Upper 150 ft. Level

The material handling raise for the Jucuara No. 1 Fortuna Vein above the Peña Blanca level in Block 76, was continued to the Upper 450 ft. level. At that point a hoist station is being prepared in such a manner that the same cage will serve the Upper 550 level if conditions warrant it.

Exploration Crosscuts

Lower 400 Esperanza Crosscut

As explained in last year's report, the Lower 400 Esperanza crosscut had entered a rock formation in which no ore bodies can be expected, but it was continued for the purpose of making a ventilation connection to the surface. It was driven a distance

of 580 feet and has reached the point where the raise for ventilation is to be started in February, 1937. The crosscut is being continued a short distance past this point to facilitate operations.

On account of the extremely loose ground which developed in the Lower 400 Esperanza crosscut it was decided to drive the surface adit, to make connection with the raise from below, considerably further than originally planned. In order to speed up this work a portable Diesel driven air compressor was purchased late in the year and placed at the Jutiapa adit portal. This adit was advanced 278 feet and lacks some 500 feet of reaching its objective. Now that compressed air is available at that point, progress will be rapid and the adit should be completed within the first few months of 1937. It is hoped that this entire ventilation project will be finished by the end of 1937.

Exploration crosscuts are planned from the ventilation raise at a higher elevation than the Lower 400, upon conclusion of the ventilation project. At least one more raise will be necessary at this point from the Lower 400 to the Lower 200 levels to facilitate such exploration.

Lower 400 Santa Fe Crosscut South

This crosscut was driven from Santa Fe vein No. 2 in a southerly direction in Block 88. Three small veins were intersected within a distance of 200 feet from Santa Fe vein No. 2, but the face has now passed out of andesite and entered rock formation similar to that in the face of the Lower 400 Esperanza crosscut and which thus far has been non-ore bearing in this mine. It is not proposed to run the crosscut any farther.

A similar crosscut on the Lower 300 level has also encountered the same formation.

The three small veins encountered in the Lower 400 level crosscut are apparently of very minor importance but they will produce some ore.

Lower 300 Independencia Crosscut

This crosscut was started as an exploration crosscut from the Independencia vein in Block 83 further to explore the ground between the Independencia and Santa Fe No. 2 veins. At a distance of 320 feet, it entered a new vein of very good grade, but of rather erratic structure. It was then decided to continue it to connect with the operating and exploration crosscut driven from the Santa Fe No. 2 on the same level and this connection has been made. It will permit of ore delivery from this new vein to Santa Fe ore chute No. 8.

Crosscuts North and South

Lower 300 Southwest Vein

In last year's report, it was proposed to run a crosscut from the Southwest vein, starting in Block No. 72, in a northeast direction, to prospect the territory between the West and the old Crucero crosscuts. This was started during the year and was driven a distance of 280 feet. At a distance of 230 feet from the Southwest, it intersected a narrow vein of fair grade ore, which is now being developed and shows some promise, especially

southeast of the crosscut. This is considered an important crosscut and it is proposed to drive it at least 1,000 feet during 1937.

The loose and faulty nature of the Southwest vein made it advisable to reconsider the best method of connecting the Lower 300 ft. level with the bottom of the old Southwest winze in Block No. 72. Inasmuch as the Santa Gertrudis No. 1 and the Southwest are connected on the Zero level it was ultimately decided to crosscut to the Santa Gertrudis vein and drift on that for raise connections to the Peña Blanca Upper 150 ft. level. Consequently, a crosscut was started opposite the Southwest north crosscut and run at right angles to the strike of the Santa Gertrudis No. 1. The vein was intersected at a distance of 220 feet, but in extremely narrow and low grade ore. A short drift was run on the west side of the crosscut and a raise started in Block 71. This raise is 85 feet high. Although it shows some improvement in the structure and grade of the vein, the Santa Gertrudis will hardly make stoping ground at this point. The raise will connect with the Zero level in the early part of 1937, making available ore reserves on the Santa Gertrudis and Southwest below the Peña Blanca level.

Should a fair tonnage be developed on the Lower 200 on these veins, an ore pass to the Lower 650 haulage level will have to be considered.

The crosscut south is being continued as purely exploration.

Lower 400 and Lower 200 Jucuara No. 2 Crosscuts North

A crosscut was run from the Jucuara No. 2 vein in Block 88 in a northerly direction as a purely exploration crosscut to determine if any ore bodies exist in the territory north of the No. 56 Fault which seems to terminate the Jucuara ore bodies in a westerly direction. This crosscut was driven a distance of 235 feet and it is proposed to continue it another 200 feet. A similar crosscut was driven on the Lower 200, from the Jucuara No. 2 in Block 91, a distance of 170 feet. Nothing of interest was encountered nor is it proposed to run it any farther. The territory ahead of it has already been explored without results, on the Upper 150 ft. level.

Crosscuts South from the Jucuara No. 2 Vein

The crosscut started in the year 1935 from the Jucuara No. 4 vein in a southerly direction to confirm the results of diamond drill hole No. 18, was continued during 1936. It was driven 330 feet and the face is 450 feet from the Jucuara No. 4. It was hoped that this crosscut might pick up possible westward extensions of the Jucuara No. 1 or the Salvador veins, as the crosscut lies west of a fault vein which seems to terminate the Salvador and Jucuara No. 1 ore bodies. Nothing of interest has thus far been encountered but this crosscut will be continued approximately 500 feet.

To explore the territory south of the Jucuara No. 2, 500 and 650 feet west of the above mentioned crosscut, two short crosscuts were driven, one on the Lower 200 and one on the Lower 400 level. Nothing of interest was encountered.

Zero Jucuara No. 1—Fortuna Crosscut Northeast

This crosscut, mentioned in last year's report, as being started in Block 76, was driven 460 feet during the year. It passed through mineralized ground containing several small but unimportant veins. The face is now very near the possible eastward extension of the Santa Gertrudis No. 1 and although not much is expected at this point the territory ahead is sufficiently attractive to warrant continuation of this crosscut during the present year. After passing the Santa Gertrudis No. 1 vein it will be turned slightly to the east in the hope that it will pick up some extensions or branches of the Fortuna North and the Carmen veins.

Upper 150 Jucuara Salvador Crosscut

This crosscut, which has been successful in the past in exposing good ore bodies, was continued for a distance of 557 feet, but has now passed out of the andesite and little faith is held in the territory immediately ahead of it. We intend to continue it, however, for some distance so as to make ventilation connections from the lower levels of the Santa Fe and San Benito workings at their western extremities. It will also serve as the best point from which to deliver material to that section below the Peña Blanca level.

Upper 150 San Blas No. 2 Crosscut South

This crosscut was driven from the extreme west end of the developed section of the San Blas No. 2 to explore the territory underneath surface outcrops known to exist in that region. The crosscut was driven 360 feet and should have cut a fairly strong vein had it continued down, but it failed to do so. It is planned, however, to continue it at least another 100 feet.

Upper 150 West Crosscut

From the branch crosscut driven west from the main West Crosscut, and mentioned in last year's report, another crosscut was driven south to explore the territory lying between the West Crosscut branch and the Jucuara No. 2 vein. It was advanced 440 feet and is now practically over similar crosscuts driven from the Lower 300, Lower 200 and Lower 400 ft. Jucuara levels. Nothing of interest was encountered. There is therefore no object in running it farther.

In this section, it is proposed in 1937, to explore the territory east of the main West Crosscut and north of the Southwest vein, as well as that west of the crosscut nearer the portal.

Upper 150 Aguacatal Crosscut

This important exploration crosscut to explore the Rosario side of the mountain south of the San Juancito river and mentioned in last year's report, was started during the year. An advance of only 222 feet was made.

The necessity of adhering to a fixed elevation in starting this crosscut, in order to facilitate operations by underground connections should ore be encountered, made it impossible to choose a portal site except in broken and blocky ground. This has delayed the work greatly as the ground is very heavy and wet, but

it is expected that an additional 200 feet will see the face in ground that will stand without heavy timbering. Once such ground is reached, good progress will be made. The crosscut is considered the best exploration project and every effort will be made to push it in 1937.

Rather extensive surface exploration work on the mountain between the San Juancito and Escobales rivers has proven the existence of several veins, one of which is returning fair assays. The original plan was to branch out from the main Aguacatal crosscut after reaching solid ground and to explore this ridge which lies eastward from the line of the main crosscut. Further study has brought up reconsideration of this plan and in its place to run two crosscuts from the surface, the main crosscut, and one at the same elevation into the territory east of the line of the main crosscut. This new plan would necessitate grading of the track from one crosscut portal to the other and as soon as engineering data is available on the relative merits of these two plans, a decision will be made. The possibility of valuable returns, from exploring the territory between the San Juancito and Escobales Rivers, is considered exceptionally good.

General Exploration Plan for the year 1937

Apart from numerous short exploration crosscuts from the various veins in search of branches from these, our main exploration program can be summarized as follows in the order of relative importance of the individual projects:

1. Active and continuous driving of the Upper 150 Aguacatal crosscut already started and a branch crosscut from it, or a separate one to explore the territory between the San Juancito and Escobales Rivers.

2. Continuous and active driving of the Lower 300 Southwest Crosscut North to explore the territory between the West Crosscut and the old Crucero Crosscut which were driven on the Upper 150 level.

3. A crosscut northeast on the Upper 150 ft. level from the West Crosscut in Block 76, or from the Southwest vein in Block 72.

4. A crosscut westward on the Upper 150 ft. level from the West Crosscut in the vicinity of Block 86.

5. A crosscut east from the Upper 450 ft. Porvenir vein to explore the territory west of the Culebra vein and where several surface outcrops of some promise exist.

Veins Worked in 1936

The 1936 ore production came from 24 veins. Ore from 8 of these came from development only. 84¾% of the tonnage production came from the Independencia, Salvador, Jucuara No. 1, Jucuara No. 2, Jucuara No. 3, Santa Fe No. 2, and San Benito No. 1 veins. The remaining small production came from San Blas No. 2, Fortuna-North, Capitana, San Joaquin, Colonia Nos. 1 and 2, Southwest, San Miguel, Jucuara No. 4, Jucuara No. 5, Santa Fe Nos. 1 and 3, San Benito No. 2, Veta 4 South, Porvenir and Santa Gertrudis Nos. 1 and 2.

Salvador Group

Salvador Vein

The greatest single production, or 36,100 tons, came from the Salvador, making the total production from this vein, since its discovery, 564,530 tons. An unbroken ore reserve of 17,000 odd tons still exists. It will probably take two or three years to reclaim this ore as the few blocks left are small and scattered.

The only possibility foreseen at present for development of additional ore reserves on the Salvador is above the Upper 250 ft. level at the extreme west end of the vein. Although the vein is narrow and very hard on the Upper 350 ft. level, values are fair and further development will be done on that level and above.

Jucuara No. 1—Fortuna

Production from the Jucuara No. 1—Fortuna amounted to 30,620 tons, stoping operations furnishing 23,311 tons of this amount.

Ore developed on the Upper 450 ft. level during the year compares quite favorably with that on the Upper 350.

Two raises have been driven to the Upper 550 and that level has now been started near the Esperanza end of the vein. Additional ore reserves can be expected only above the Upper 450 ft. level. The similarity of this vein to the Salvador justifies the prediction that ore will extend to at least the Upper 650 ft. level, but it is anticipated that only the Upper 550 ft. level will be developed this year in conjunction with additional development on the Upper 450. The latter level has been connected from both the Jucuara and Esperanza ends, but there are numerous branch veins characteristic of the Jucuara No. 1 on all levels, the limits of which have yet to be defined on this level.

Conservative stoping will be carried on in the Jucuara No. 1 more or less in line with that of the past year.

Fortuna North

451 feet of development was done on the Upper 450 ft. level of this vein. No further development is warranted until a stope is taken up from the Upper 450 ft. level. The vein has always been low grade with a very short minable ore body.

It is planned during the coming year to connect the Upper 450 Fortuna North with the Upper 450 Porvenir. The east face of this level has been advanced to nearly the projected extension of the north end of the Porvenir.

Production amounted to 3,935 tons, practically all of which came from stopes.

Independencia Group

Independencia Vein

Production of 16,792 tons from the Independencia left this old vein practically depleted at the end of this year. 7,000 odd tons of fair grade ore in scattered sections still remain.

San Blas No. 2

Development was continued on the Upper 150 ft. level following the vein eastward toward the Esperanza crosscut. As the drift

neared the Salvador it became evident that the San Blas No. 2 would intersect it in the vicinity of the Esperanza crosscut or in Block 75. The character and grade of the vein at this level did not justify carrying the drift to its natural intersection with the Salvador. For ventilation purposes a crosscut was run from the east end of the vein development to the Salvador. Although the vein is narrow and low grade it may warrant stoping above the Upper 150 in a few isolated spots.

A crosscut was run from the Salvador on the Zero level to enable opening the same level on the San Blas. There is little change in the ore between the Upper and the Zero. Development will be continued on the Zero, but unless a stronger or a better grade vein is found at that horizon, the San Blas No. 2 will never be an important producer. Insufficient ore has been blocked out on it thus far to warrant including it in the ore reserves.

Santa Fe Group

San Benito Vein No. 1

1,336 feet of development in this vein resulted in an addition of ore reserves, permitting the establishment of 6,202 tons at the end of the year, notwithstanding the withdrawal of 10,702 tons during 1936.

Stope development at the east end of this vein below the Peña Blanca level and development raises above the Peña Blanca level at the same end, disclosed minable ore bodies not heretofore taken into account.

A new Upper 250 ft. level is being driven from Block 80 to connect with the old Upper 250 ft. level upon which no work has been done since 1928.

Any substantial additions to the San Benito ore reserves will have to come from above the Upper 250 ft. level. A raise from the Upper 250 and now nearly to the Upper 350 has exposed sufficiently good ore to warrant increased optimism as to the future of the San Benito vein in the upper reaches of the mine.

Development will be prosecuted in this section and after the Upper 350 ft. level has been well extended it is proposed to do some crosscutting in the hope that some upward extension of the Santa Fe vein may be found.

The Lower 300 Santa Fe-Independencia Crosscut intersected the downward extension of the San Benito in its extreme west end at a distance of 390 feet from the Santa Fe, and 510 feet from the Independencia. A level westward from this crosscut on the San Benito is now being driven and will give access to the San Benito ore reserves below the Lower 250 ft. level.

San Benito Vein No. 2

1,364 feet of development resulted on this vein, exposing it for a length of 200 feet on the Lower 300 ft. level, 300 feet on the Lower 400, and nearly 700 feet on the Lower 500.

Production amounted to 1,665 tons from development. A small ore reserve of 15,389 tons is indicated. Development westward has recently disclosed a somewhat stronger and better grade vein than anywhere yet exposed on the San Benito No. 2. This better vein may extend some distance and add considerably to

its reserves. On the other hand, the hard tight rock formation in the west end of the Santa Fe section is an unfavorable factor reacting against the probable existence of any large ore bodies west of the present development.

Santa Fe No. 1

The new vein already mentioned as encountered by the Lower 300 Independencia Crosscut South has many of the characteristics of the original main Santa Fe. It is also being called the Santa Fe vein No. 1. Its strike is practically the same and development eastward will apparently terminate in the westward workings of the old Santa Fe. It has also been cut by the Lower 400 crosscut, north from the Santa Fe vein No. 2 and the Lower 400 and Lower 300 levels have been opened approximately 500 feet each. Good widths of exceptionally good grade ore have been exposed by the 300 ft. level and good grade ore, rather erratic in structure and width on the Lower 400. Raises from the Lower 300, some of which are now nearly to the Lower 200, indicate that the vein is strong and of good grade at that elevation.

It appears, however, that this vein does not extend to the Peña Blanca level as the Jucuara-Salvador crosscut on that level has already passed the projected extension according to the dip exposed on the Lower 300. Over, 18,000 tons have already been blocked out, averaging slightly over 50 ounces of silver per ton. It is believed that material additions will be made during the present year. On the other hand it is not anticipated that this vein will develop into anything like as large a producer as the Santa Fe No. 2.

Santa Fe Vein No. 2

Development throughout the year was reasonably gratifying. Ore reserves were increased from 2,800,000 to 3,200,000 ounces of silver with a corresponding increase in gold reserve. This has been brought about largely by active development on the Lower 300, Lower 400 and Lower 500 ft. levels westward. Both the Lower 300 and Lower 400 levels have entered a crushed zone similar to that existing in the western end of the Upper 250 level. This zone has all the earmarks of being a transition zone between the ore bearing andesite and the relatively barren sedimentaries. Continued development on the Lower 500 level may add something to the reserves but in general it may be stated that the field for development on the Santa Fe No. 2 has been fairly well eliminated below the Lower 200 level.

In previous reports, it has been mentioned that there is reason to believe that the upward extension of the Santa Fe No. 2 should be found by means of crosscuts from the Lower 200 level. This exploratory work will be started without fail this year.

Santa Fe Vein No. 3

The lateral and vertical limits of this vein were defined during the year 1935. Operations therefore were confined chiefly to stoping. Production amounted to 4,726 tons. It is proposed to increase production from this vein during the present year.

The Santa Fe veins in general present further possibilities of development. The field for exploration of this network below

the Lower 200 level, however, has been practically eliminated. It is therefore proposed to confine operations to extending development to the ore limits of the present known veins, actively stope this good gold ratio ore, and transfer exploration work to more favorable territory.

In connection with the Santa Fe veins it must be said that although they are relatively high grade, on the whole they are considerably below practical stoping width, very hard and are enclosed in hard walls. These costly mining features point to the advisability of using heavier stoping machines for this section.

Jucuara Group

Jucuara Vein No. 2

The greatest individual ore reserve increase occurred in the Jucuara Vein No. 2. This increase resulted largely from development on the Lower 400, Lower 500 and Lower 650 levels.

Ore production amounted to 13,260 tons, all of which, excepting 22 tons, came from development.

Lateral development on the Lower 400 ft. level was completed during the first half of the year. As anticipated, the vein terminated westward with its intersection with the No. 56 Fault.

Access to the vein on the Lower 500 level was best obtained by crosscutting from Jucuara Shaft No. 2 Station. Completion of this crosscut delayed development and that level is just now entering the better grade section of the vein. It is expected that good ore will be encountered in this level for the next 700 feet westward.

Minable ore extends on the Jucuara No. 2 to the Lower 650 ft. level. Although values are erratic and ore bodies very small in lateral extent, it would not be surprising if the Lower 650 should expose considerable additional ore. The Lower 650 will be extended perhaps an additional 400 feet before it encounters the No. 56 Fault.

The existence of 42,000 odd ounces of gold in the Jucuara No. 2 reserve dictates the advisability of milling some of this ore during 1937 to increase gold production. It is planned to stope this vein conservatively and to begin such work early in the year 1937.

Jucuara Vein No. 3

The output of 13,087 tons came almost entirely from stopes. As explained in last year's report, the Jucuara Vein No. 3 had been completely developed. Stoping will be continued throughout the year.

Jucuara Vein No. 4

Only 109 feet of drifting was done on Jucuara No. 4. An extension of this vein below the Lower 400 ft. level has not yet been encountered. More important development work on Jucuara No. 2 has precluded the search for No. 4, which, as explained in previous years, is a branch of No. 2. Whether No. 4 extends to the Lower 500 as a separate vein or joins No. 2 again on its downward extension between the Lower 400 and 500 ft. levels, is questionable. The necessary exploration will be done, this year, on the Lower 500 to determine this point definitely. Should

it extend to the Lower 500 as a separate vein additional reserves can be expected from its development.

Only a relatively small stope was started on Jucuara No. 4 during 1936 and stoping will be continued throughout 1937.

Jucuara Vein No. 5

Development of this vein on the Lower 400 ft. level, as proposed in last year's report, failed to expose minable values. It was impossible therefore to add any additional reserves to it. It is considered of very minor importance.

No. 56 Fault Vein

In order to facilitate stoping operations and to determine the extent of mineralization of the fault above the Lower 200, a raise was driven from that level in Block 89 to the Peña Blanca level. Two small low grade stopes were started during the year, one in Block 87 and one in Block 89. Additional ore reserves cannot be expected for this vein and it is proposed to continue stoping it in a small way.

Jucuara Veins-General

Crosscuts on the Lower 400, Lower 300 and Lower 200 ft. levels to verify the extension of Jucuara No. 2 beyond No. 56 Fault, met with no encouraging results. Some additional exploration work is planned during 1937 but indications are now quite strong that the Jucuara veins do not extend westward of this fault. Such being the case, the year 1937 will see development of the Jucuara Nos. 2, 3, 4 and 5 veins nearing completion.

Old Mine Group

Capitana

The Capitana produced but 688 tons, all from stopes. Only 4,000 tons remain in this vein, but it is not proposed to mine it until the small ore reserves remaining in the San Joaquin have been entirely eliminated.

San Joaquin

In order to concentrate work on these isolated old mine bodies, stoping was discontinued during the latter half of the year on all Old Mine Group veins except the San Joaquin. The necessity of maintaining a recovery crew on the latter made it advisable to stope at the same time, the old recovered ground. Only 148 tons were produced but an effort will be made to eliminate this reserve during 1937. It still shows 4,600 tons of low grade ore.

Colonia Nos. 1 and 2

162 feet of development on the Colonia No. 1 and 508 feet on No. 2 were driven during the year.

A cross vein encountered when driving the main Colonia South drift, and named Colonia No. 2, was opened on the Lower 400 ft. level a total of 340 feet. Although very narrow, some fair ore occurs in it, making it possible to block 1,600 tons of low grade ore.

Costly supervision in such an isolated section made it necessary to suspend work for the time being.

Continuation of the main Colonia South drift, on the Lower 400 to its intersection with the Nueva vein, will be postponed

until such a time as it is practicable to concentrate more work in that section of the mine. 80 feet of drifting should intersect the Nueva.

Approximately 10,000 tons of ore still remain in the Colonia 1 and 2. It probably will not be touched this year.

South San Miguel Stringer

The connection mentioned in last year's report from the Esperanza crosscut to the west face of the South San Miguel Stringer, was effected.

The 200 feet of vein exposed by this work shows no minable ore.

Southwest Vein

Discouraging values on the Southwest vein on the Lower 300 dictated the advisability of postponing development on that level until the Lower 200 could be first prospected.

As previously mentioned, under the heading of Crosscuts North and South, Lower 300 Southwest, the Santa Gertrudis No. 1 was encountered on the Lower 300 and when the raise now being driven on it to the Zero level is finished, the Southwest will be prospected at the Lower 200 elevation.

Miscellaneous Group

Veta No. 4 South

Development on this vein consisted of 1,029 feet of drifting and 203 feet of raising. Where the vein was entered by the crosscut on the Upper 150 ft. level from the Porvenir vein, ore occurrence was extremely encouraging. Lateral development, however, proved the vein at this horizon to be little if any better than on the Upper 350. Values are erratic and structural features do not point to the vein being very strong at any horizon. Development southward has placed the face of the Veta 4 South on the Upper 350 ft. level, 100 feet from the Carmen in Block 68. Expected improvement in the vein as it neared the Carmen and Salvador did not materialize.

Two raises from the Peña Blanca level have reached a point where the Upper 250 ft. level is now being opened. This level promises to be somewhat better than either the Upper 150 or the Upper 350 ft. levels.

It has been possible to block out 12,000 odd tons of 24 ounce silver ore. Development will proceed actively on the Upper 250 ft. level, but there is no reason to expect that Veta No. 4 South will ever be a heavy producer.

Production amounted to 2,548 tons, all from development.

Porvenir

Development on the Porvenir was confined largely to raising to the Upper 450 ft. level. Two raises were completed, but the level has not yet been started. It is proposed to connect the two raises in the Upper 450 ft. levels and extend that level northward to its intersection with the Fortuna North vein.

The conclusion of this work will facilitate driving of an exploration crosscut east from the Porvenir, in search of the downward extension of veins outcropping 700 feet above the Upper

450 ft. level and west of the Culebra vein. It is doubtful whether the exloration crosscut can be started until late in the year.

Production amounted to 714 tons, all from development.

Santa Gertrudis No. 1

As already mentioned under crosscuts, the Santa Gertrudis No. 1 shows no commercial ore at the Lower 300 ft. level. A few scattered high assays appear in the raise to the Lower 200 ft. level. Until the Lower 200 is partially developed, it will be impossible to say whether or not there is stoping ore on the Lower 200 ft. level. Indications are fairly strong that ore will not reach the Lower 300.

Production amounted to 155 tons, all from development.

Santa Gertrudis No. 2

Conditions did not permit exploration for this vein at any horizon other than on the Zero and the Upper 250 ft. levels, where development was done in 1935.

Although this vein at present silver prices offers little encouragement for development, an effort will be made during 1937 to prospect it on the Peña Blanca level or possibly on the Upper 350.

Production amounted to 811 tons, partly from development and partly from stopes.

THE MILL

Tonnage Crushed

	1936	1935
Total wet tons received	181,898.49	170,570.89
Average per cent of moisture	8.302	8.0293
Total dry tons milled	166,800.	156,800.
Average tons milled per day (366 Days)	456.	430.
Average tons milled per day, full running time	496.	467.
Average tons milled per day, per 1,850 lbs. stamps	24.8	22.9
Number of 1,850 lbs. stamps	20.	20.
Total tons treated by mill to Dec. 31, 1936..	2,821,208.	2,654,408.

Recovery

	1936	1935
Average ounces silver received per ton	20.390	18.387
Total ounces silver produced	3,401,024.	2,883,050.
Average ounces silver recovered per ton	18.610	16.878
Total ounces silver recovered	3,104,174.	2,646,411.
Average silver recovery, per cent	91.272	91.792
Average ounces gold received per ton	.1125	.0833
Total ounces gold received	18,765.	13,061.
Average ounces gold recovered per ton	.1072	.0780
Total ounces gold recovered	17,878.	12,236.
Average gold recovery, per cent	95.275	93.637

THE MILL

Treatment Period Detail

	1936				1935			
	Hrs.	Min.	Ag. %	Au. %	Hrs.	Min.	Ag. %	Au. %
Extraction by Crushing Solution	9	00	38.87	73.78	9	00	38.04	73.23
Extraction by Agitation	90	52	52.47	20.89	91	27	54.22	20.65
Extraction in Slime Presses	1	05	.45	1.33	1	05	.51	.72
	100	57	91.79	96.00	101	32	92.77	94.60
Less Dissolved Value Loss			.52	.73			.98	.96
Recovery			91.27	95.27			91.79	93.64
Per Cent Sand Not Passing 150 mesh			29.834				30.425	

Comparative Statement
On Consumption of Mill Supplies

	1936					1935				
	Amount Consumed	Total Cost U. S. Cy.	Cost Per Unit	Cost Per ton Crushed (Tons) 166,800	Cost Per Fine Oz. Bullion Produced (Ounces) 3,122,052	Amount Consumed	Total Cost U. S. Cy.	Cost Per Unit	Cost Per ton Crushed (Tons) 156,800	Cost Per Fine Oz. Bullion Produced (Ounces) 2,658,647
Cyanide 100% KCN	654,062 lbs.	$80,348.07	$.1228	$.4817	$.0257	523,374 lbs.	$61,291.04	$.1171	$.3909	$.0230
Steel Balls	92,324 "	5,034.10	.0545	.0302	.0016	52,140 "	3,144.04	.0603	.0201	.0012
Zinc Dust	113,496 "	13,590.64	.1197	.0815	.0044	92,933 "	10,675.89	.1149	.0681	.0040
Muriatic Acid	7,935 "	1,338.23	.1686	.0080	.0004	10,005 "	1,658.45	.1658	.0106	.0006
Lime	2,566,734 "	18,125.13	.0071	.1087	.0058	2,794,493 "	19,984.75	.0072	.1275	.0075
Borax Glass	3,650 "	788.08	.2159	.0047	.0003	2,850 "	592.80	.2080	.0038	.0002
Soda	212 "	13.43	.0633	.0001	.....	.....	.....	.....	.....	.....
Fuel Oil	6,638 gals.	2,124.43	.3200	.0127	.0007	4,746 gals.	1,404.82	.2960	.0090	.0005
Sulphur	249,270 lbs.	11,285.69	.0453	.0677	.0036	282,625 lbs.	12,995.67	.0460	.0829	.0049
72" Filter Canvas	4,487 yds.	4,456.00	.9931	.0267	.0015	4,079 yds.	3,974.57	.9744	.0253	.0015
		$137,103.80		$.8220	$.0439		$115,722.03		$.7382	$.0434

Tonnage Milled

Favorable power conditions contributed to the establishment of a new record tonnage of 166,800. This record was established notwithstanding the necessity of a 10-day shut down in April to replace the bottom and half the sides of the wooden ore bin with steel plate. This investment will avoid for many years to come the necessity of any further shut-downs for mill bin repairs.

Mill buildings and equipment therein are in a good state of repair and no major outlays are contemplated for maintenance.

POWER

Rainfall	1936	1935
Total rainfall, inches	70.35	63.40
Number of rainy days	206	182
Greatest monthly rainfall, inches	15.98 (May)	16.29 (Oct.)
Lowest monthly rainfall, inches	.37 (April)	.31 (Mar.)
Greatest single rainfall, inches	2.15 (May)	2.80 (Sept.)

POWER DISTRIBUTION

	1936		1935	
	Kilowatt Hours	K.W. Hours Per Ton	Kilowatt Hours	K.W. Hrs. Per Ton
Ventilation	17,815	.107	27,660	.176
Mine Power	2,518,110	15.097	2,390,181	15.244
Electric Haulage	188,350	1.129	203,220	1.296
Blacksmithing	44,100	.264	39,200	.250
Mine Lights	35,750	.214	33,400	.213
Hoisting	18,275	.109	15,529	.099
Mill Power	5,482,355	32.868	5,599,010	35.708
Mill Lights	52,170	.313	48,220	.308
Surface Lights	489,935	2.937	452,130	2.884
Surface Power	54,300	.326	97,870	.624
Machine Shop	90,960	.545	125,200	.798
Laboratory	20,130	.121	32,300	.206
Totals	9,012,250	54.030	9,063,920	57.806
Power Production by:				
San Juancito Plant		50.15%		55.70%
Guadalupe Plant		40.51%		34.14%
Aguacatal Plant		9.34%		10.16%
		100.00%		100.00%

COST OF POWER PRODUCTION

	1936			1935		
	Amount U.S.Cy.	Per Ton	K.W. Hour	Amount U.S.Cy.	Per Ton	K.W. Hour
Labor	$13,544.82	.08120	.0015029	$12,724.07	.08115	.0014038
Supplies	5,288.75	.03171	.0005868	4,345.13	.02771	.0004794
Totals	$18,833.57	.11291	.0020897	$17,069.20	.10886	.0018832

Based on Horsepower Generated:

	1936	1935
Horsepower Hours	12,080,764	12,150,027
Cost per Horsepower Hour	$ 0.001559	$ 0.001405
Cost per Horsepower Year	$13.694256	$12.30780
Cost per Horsepower Year, Increase	$ 1.386456	

Power plants and flumes are in reasonably good condition and no abnormal expenditures are anticipated in connection with them this year.

OTHER DEPARTMENTS

Medical Department

	1936	1935
Cost of Maintenance	$ 8,707.89	$ 9,279.95
Total consultations, examinations and treatments	10,955	13,850

Assay Office and Laboratory

	1936	1935
Total number of assays run	31,923	36,075
Average number of assays per day	87	99
Total Cost	$ 8,863.83	$ 8,091.51
Cost per assay	.28	.22

Schools

	1936	1935
Average Daily Attendance during year:		
Boys' School	115	125
Girls' School	105	135
Rosario Mixed School	28	31
La Reforma Mixed School	26	30
Rosario Foreign School	9	10
Total Expense—Native Schools	$ 9,461.75	$10,732.43
Total Expense—Rosario Foreign School	2,420.64	2,397.05
Total Expense—Native & Foreign Schools	$11,882.39	$13,129.48
Decrease	$ 1,247.09	

The decrease in the cost of maintenance of the native schools was due to closing of the schools by the Municipality for a longer term than normally called for by the school year.

The proposed new school mentioned in last year's report, to be built in the village of La Reforma, was completed early in the year and filled a much needed want for education in that district.

Police and Garrison

	1936	1935
Total maintenance expense	$16,240.43	$16,718.80
Decrease	478.37	

Hotel

	1936	1935
Total number of meals served	26,640	28,873
Total Cost	$12,542.00	$16,039.98
Cost per meal	.47	.556

The marked decrease in the maintenance of the hotel mess was brought about by reorganization of the personnel and improvements made in the method of buying local products.

Roads

	1936	1935
Total maintenance	$ 9,961.39	$ 7,180.22
Increase	2,781.17	

Road expenditures were increased during the year compared to 1935, largely due to an extensive ground slide near Tegucigalpa which carried away the entire road for a distance of over 100 feet. The Municipality cooperated handsomely in the quick repair of this section, thus avoiding any delay in the delivery of important supplies.

Road expenditures are always subject to local weather conditions and although the road between here and Tegucigalpa annually requires extensive repairs, the expense this year should not be abnormal.

Agencies

	1936	1935
Total expense	$ 3,841.85	$ 3,830.78
Increase	11.07	

EXPANSION

Several gold prospects were examined in Honduras but nothing sufficiently attractive was found to warrant further expenditures.

Nicaraguan Properties

An option taken on the El Golfo property as of January 13, 1935, was abandoned in October 1936. The other options taken jointly with some other companies upon gold properties (referred to in the Annual Report for 1935), as well as options on two additional small properties acquired in 1936, are still under investigation.

The Company also took an interest in June, 1936 in an option in another gold property in Nicaragua, but upon investigation the option was not exercised.

CONCLUSION

Outstanding features of the year's operations may be summarized as follows:

A very satisfactory profit derived despite the great drop in the price of silver as compared with the previous year.

A record tonnage milled with a minimum outlay for new equipment.

A record low per ton cost.

Establishment at the end of the year of the largest ore reserve recorded in the history of the company.

The attainment of these results is due to the active and cooperative service rendered by the local staff in all departments.

It is again a pleasure to acknowledge the full support, cooperation and interest of the Officers and Directors in our efforts to maintain a successful mining enterprise, the future of which can be viewed with confidence.

Respectfully submitted,

K. H. MATHESON,
General Manager.

Annex "A"
Active Ore Reserves

ESTIMATED RESERVES (13 and 14 cu. ft. per ton)	Average Width Feet			Tons of ore plus waste	Av. Troy ounces per ton		Total Troy ounces	
	Vein	Waste	Stope		Ag.	Au.	Ag.	Au.
Veins								
Independencia Group								
Independencia	1.92	2.64	4.56	7,635	16.	.08	120,149	585
San Blas	.93	2.07	3.00	2,900	18.	.03	52,200	87
Salvador Group								
Salvador	1.79	2.10	3.89	17,139	24.	.10	413,744	1,643
Jucuara No. 1 (Fortuna)..	2.61	1.62	4.23	207.695	29.	.07	5,999,137	13,688
Fortuna North	1.88	1.48	3.36	2,702	21.	.04	55,913	108
Fortuna Vein	1.36	1.64	3.00	1,544	21.	.04	31,957	67
Jucuara Group								
Jucuara No. 2	3.40	2.42	5.82	123,196	31.	.35	3,861,824	42,741
Jucuara No. 3	1.70	2.03	3.73	17,636	16.	.34	276,149	6,038
Jucuara No. 4	2.66	1.61	4.27	32,800	28.	.09	918,596	2,954
Jucuara No. 5	2.18	1.99	4.17	6,005	15.	.10	90,118	613
56 Fault Vein	1.92	2.37	4.29	4,498	18.	.22	82,729	1,003
Santa Fe Group								
Santa Fe Main Vein..	2.27	2.73	5.00	1,877	22.	.10	40,896	187
No. 1	2.81	1.38	4.19	18,690	52.	.19	969,072	3,538
No. 2	2.89	2.52	5.41	76,123	42.	.43	3,212,782	32,969
No. 3	1.88	2.46	4.34	24,109	25.	.27	603,102	6,488
San Benito No. 1	.97	2.24	3.21	6,202	15.	.14	92,189	860
San Benito No. 2	1.62	1.38	3.00	15,389	26.	.22	397,953	3,354
Old Mine Group								
San Joaquin ..	1.06	1.94	3.00	4,598	14.	.23	62,973	1,057
Colonia	1.00	2.09	3.09	8,980	15.	.13	130,939	1,169
Capitana	.81	2.19	3.00	4,085	4.	.22	15,883	884
Colonia No. 2	1.38	1.62	3.00	1,602	11.	.10	17,541	163
Other Veins								
Veta No. 4 South	1.54	1.46	3.00	12,669	24.	.03	297,860	437
Santa Gertrudis ..	.94	2.06	3.00	6,300	20.	.04	126,000	252
TOTAL				604,374	29.57	.2000	17,869,706	120,885

BROKEN ORE RESERVES (20.5 cu. ft. per ton)

Veins	
Independencia	573
Salvador	11,090
Jucuara No. 1 (Fortuna).....	11,217
Santa Fe No. 2.....	6,498
Santa Fe No. 3.....	4,259
Jucuara No. 3.....	3,605
Jucuara No. 4.....	1,682
San Benito No. 1.....	3,390
San Blas No. 2.....	150
San Joaquin	951
Mine Storage Chutes	1,500
Mill Ore Bin	633
Total	45,548

Summary—Active Reserves

Estimated Ore at 13 and 14 cu. cu. ft. per ton.....	604,374	29.57	.2000	17,869,706	120,885
Broken Ore in Stopes at 20.5 cu. ft. per ton	45,548	24.00	.1600	1,093,152	7,287
TOTAL ACTIVE RESERVES AS OF JANUARY 1, 1937	649,922	29.18	.1972	18,962,858	128,172

Annex "B"

Inactive Ore Reserves

ESTIMATED RESERVES
(13 cu. ft. per ton)

Veins	Tons of ore plus waste	Ounces Per ton Ag.	Au.	Total Troy Ounces Ag.	Au.
Esperanza (South San Miguel Extension South)	5,450	14.	.04	76,300	218
Porvenir	2,088	13.	.03	27,189	53
Nueva	8,450	9.	.11	76,050	929
Southwest	10,500	16.	.03	168,000	315
Veta No. 4 North	3,000	12.	.03	36,000	90
Carmen	10,000	16.	.03	160,000	300
TOTAL INACTIVE RESERVES AS OF JAN. 1, 1937	39,488	13.76	.0482	543,539	1,905

Annex "C"

Exploration and Development for the Year 1936

Veins and Groups	Drifts	Cross-cuts	Raises	Winzes	Total Feet
Independencia Group					
Independencia	181.	459.	.....	....	640.
San Blas No. 2	469.	428.	207.	....	1,104.
Salvador Group					
Salvador	687.	231.	273.	22	1,213.
Jucuara No. 1 (Fortuna)	2,096.	1,191.	1,309.	34	4,630.
Fortuna North	451.	84.	.....	....	535.
Jucuara Group					
Jucuara No. 2	3,135.	842.	1,316.	....	5,293.
Jucuara No. 3		473.	230.	....	703.
Jucuara No. 4	109.	119.	.....	....	228.
Jacuara No. 5	176.	52.	80.	....	308.
Santa Fe Group					
Santa Fe No. 1	1,030.	383.	388.	....	1,801.
Santa Fe No. 2	1.820.	597.	750.	....	3,167.
Santa Fe No. 3	55.	284.	.....	....	339.
San Benito No. 1	959.	32.	345.	....	1,336.
San Benito No. 2	874.	74.	416.	....	1,364.
Old Mine Group					
Colonia No. 1	109.	.....	53.	....	162.
Colonia No. 2	430.	.....	78.	....	508.
Southwest No. 1	104.	480.	.....	....	584.
Southwest No. 2	25.	.....	.....	....	25.
South San Miguel	123.	64.	.....	....	187.
Other Veins					
Santa Gertrudis No. 1	.....	.....	75.	....	75.
Santa Gertrudis No. 2	14.	70.	54.	....	138.
Veta No. 4 North	10.	.....	.....	....	10.
Veta No. 4 South	1,029.	110.	203.	....	1,342.
Porvenir	186.	.....	275.	4	465.
Esperanza Cross Cuts					
Lower 400 Level	.....	674.	.....	54	728.
Jucuara Cross Cuts					
Upper 150 Level	.....	610.	.....	....	610.
Lower 300 Level	.....	144.	.....	....	144.
Lower 500 Level	.....	260.	.....	....	260.
Other Cross Cuts					
Ventilation Cross Cut (Jutiapa)	.....	413.	.....	....	413.
West Cross Cut	.....	454.	.....	....	454.
Aguacatal Cross Cut	.....	222.	.....	....	222.
Station Cross Cuts					
Lower 500 Level	.....	231.	.....	....	231.
Lower 650 Level	.....	39.	.....	....	39.
Shaft Raises					
Shaft Raise No. 2	.....	.....	221.	....	221.
Shaft Raise No. 5	.....	.....	44.	....	44.
TOTALS	14,072.	9,020.	6,317.	114	29,523.

ORE PRODUCTION

Annex "D"

From Stoping Operations: *Veins*	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Independencia Group													
Independencia	1,386	1,661	2,170	1,017	1,957	2,172	1,918	1,152	879	1,167	529	181	16,189
San Blas No. 2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	118	118
Salvador Group													
Salvador	2,306	2,541	3,140	1,993	2,310	2,676	3,035	4,494	3,736	2,683	2,217	2,539	33,670
Jucuara No. 1 Fortuna	2,890	1,132	835	1,130	1,147	779	2,111	2,905	2,173	1,674	3,284	3,251	23,311
Fortuna North	1,018	1,152	629	221	201	350	4	.....	142	39	.....	.....	3,756
Jucuara Group													
Jucuara No. 2	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22
Jucuara No. 3	816	954	954	641	1,043	1,120	932	825	1,279	1,442	1,352	1,319	12,677
Jucuara No. 4	.....	.....	.....	.....	.....	.....	.....	.....	362	425	202	343	1,332
Santa Fe Group													
Santa Fe No. 1	.....	.....	23	119	.....	.....	.....	.....	2	.....	.....	.....	144
Santa Fe No. 2	241	359	1,020	476	1,635	1,602	2,069	1,748	1,704	1,659	1,192	1,046	14,751
Santa Fe No. 3	193	398	275	25	331	326	252	475	556	658	667	541	4,697
San Benito No. 1	778	1,098	1,079	620	1,241	1,219	313	209	299	147	412	818	8,233
Old Mine Group													
Capitana	.....	35	50	.....	.....	.....	47	23	121	143	218	51	688
San Joaquin	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	23	83	130
Old Fills	94	66	35	13	7	52	17	26	.....	.....	.....	.....	310
Colonia No. 1	303	332	145	.....	111	166	167	68	.....	.....	.....	.....	1,292
Miscellaneous Group													
Santa Gertrudis No. 2	.....	.....	.....	.....	.....	.....	.....	.....	42	358	189	87	676
STOPING TOTALS	10,047	9,728	10,355	6,255	9,983	10,462	10,865	11,925	11,295	10,419	10,285	10,377	121,996

From Development Operations:
Veins

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Independencia Group													
Independencia	.....	.....	144	70	381	.....	.....	8	.....	.....	.....	.....	603
San Blas No. 2	237	321	324	149	115	.....	.....	.....	.....	.....	36	103	1,285
Salvador Group													
Salvador	141	338	345	117	467	309	347	148	67	.....	57	94	2,430
Jucuara No. 1 Fortuna	698	584	362	255	859	578	632	475	545	812	678	831	7,309
Fortuna North	.....	23	36	14	.....	.....	.....	.....	93	13	.....	.....	179
Jucuara Group													
Jucuara No. 2	1,152	1,066	749	551	1,257	1,749	1,295	642	1,109	1,342	1,179	1,147	13,238
Jucuara No. 3	22	11	10	.....	.....	.....	.....	90	102	113	2	60	410
Jucuara No. 4	117	54	14	.....	.....	41	3	.....	.....	3	.....	.....	232
Jucuara No. 5	191	115	9	.....	.....	33	39	.....	.....	.....	.....	.....	387
Santa Fe Group													
Santa Fe No 1	.....	.....	.....	.....	.....	.....	21	212	459	593	817	849	2,951
Santa Fe No. 2	16	301	322	318	662	546	553	763	633	833	554	613	6,114
Santa Fe No. 3	.....	.....	.....	2	.....	27	.....	.....	.....	.....	.....	.....	29
San Benito No. 1	155	177	100	24	118	222	209	.....	178	288	496	502	2,469
San Benito No. 2	173	326	219	112	96	64	193	76	43	60	117	186	1,665
Old Mine Group													
San Joaquin	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18
Colonia No. 1	250	31	24	.....	.....	.....	.....	36	.....	.....	.....	.....	341
Colonia No. 2	.....	280	33	.....	36	179	119	18	.....	.....	.....	.....	665
Southwest	233	136	169	.....	20	62	132	75	5	11	31	38	912
Miscellaneous Group													
Veta No. 4 South	177	270	106	75	477	234	100	260	159	239	162	289	2,548
Porvenir	13	93	36	.....	92	101	89	176	114	.....	.....	.....	714
Santa Gertrudis No. 1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26	129	155
Santa Gertrudis No. 2	3	.....	.....	.....	.....	.....	.....	.....	.....	122	10	.....	135
San Miguel	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
DEVELOPMENT TOTALS	3,596	4,139	3,002	1,687	4,580	4,145	3,732	2,979	3,507	4,429	4,165	4,841	44,802
STOPING TOTALS	10,047	9,728	10,355	6,255	9,983	10,462	10,865	11,925	11,295	10,419	10,285	10,377	121,996
GRAND TOTALS	13,643	13,867	13,357	7,942	14,563	14,607	14,597	14,904	14,802	14,848	14,450	15,218	166,798

Annex "E"
TONNAGE MINED
From October 1, 1907 to January 1, 1937

Veins	Total including Stoping, Devel. & Filling Oct. 1, 1907 to Dec. 31, 1935	Total including Stoping, Devel. and Filling Year 1936	Grand total including Stoping, Devel. and Filling Jan. 1, 1937
Buena Ventura	98,490	.....	98,490
Candelaria Group	166,573	.....	166,573
Capitana	59,734	688	60,422
Carmen No. 1	18,365	.....	18,365
Carmen No. 2	1,105	.....	1,105
Catalina	6,587	.....	6,587
Colonia No. 1	59,919	1,633	61,552
Colonia No. 2		665	665
Concepcion	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	106,245	.....	106,245
Esperanza	8,710	.....	8,710
Fortuna Group	90,311	3,935	94,246
Guadalupe	61,177	.....	61,177
Independencia	256,250	16,792	273,042
Jucuara No. 1 (Fortuna)	77,014	30,620	107,634
Jucuara No. 2	37,734	13,260	50,994
Jucuara No. 3	12,074	13,087	25,161
Jucuara No. 4	5,210	1,564	6,774
Jucuara No. 5	108	387	495
North	4,647	.....	4,647
Northwest	89,378	.....	89,378
Nueva	28,147	.....	28,147
Porvenir	1,844	714	2,558
Rosario	150,915	.....	150,915
Salvador	528,430	36,100	564,530
San Benito No. 1	84,913	10,702	95,615
San Benito No. 2	1,251	1,665	2,916
San Blas No. 1	6,123	.....	6,123
San Blas No. 2	.....	1,403	1,403
San Joaquin	65,462	148	65,610
San Luis	2,389	.....	2,389
San Miguel North	174,801	.....	174,801
San Miguel Group	125,842	13	125,855
Santa Fe Main Vein	185,138	.....	185,138
Santa Fe No. 1		3,095	3,095
Santa Fe No. 2	12,145	20,865	33,010
Santa Fe No. 3	15,540	4,726	20,266
Santa Gertrudis No. 1	30,789	155	30,944
Santa Gertrudis No. 2	928	811	1,739
Socorro	22,592	.....	22,592
Southwest	20,857	912	21,769
Termopilas	1,094	.....	1,094
West	97,005	.....	97,005
Veta No. 4 North	8,323	.....	8,323
Veta No. 4 South	1,319	2,548	3,867
Ore from Development	63,599	.....	63,599
Miscellaneous	5,070	310	5,380
TOTALS	2,820,727	166,798	2,987,525

Summary
From October 1, 1907, to January 1, 1937

From Stoping	2,299,430
From Development	452,694
From Fills	235,401
TOTAL	2,987,525

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NEW YORK and HONDURAS ROSARIO MINING COMPANY



FIFTY-SEVENTH ANNUAL REPORT
NINETEEN HUNDRED AND THIRTY-SEVEN

REPORT of the
NEW YORK and HONDURAS
ROSARIO MINING COMPANY

NEW YORK

JANUARY 1, 1938

OFFICERS

WM. A. PRENDERGAST, *President*
H. A. GUESS, *Vice-President*
W. C. LANGLEY, *Treasurer*
J. PERLMAN, *Secretary*

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H. A. GUESS
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AMBROSE G. TODD
RICHARD H. VALENTINE

EXECUTIVE COMMITTEE

LEWIS L. CLARKE, *Chairman*
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AMBROSE G. TODD
WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

PRESIDENT'S REPORT

February 21, 1938.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company:

This is the Fifty-seventh Annual Report of the Company, and covers the year 1937.

The earnings of 1937 were the best in this Company's history. The report of our General Manager, Mr. Matheson, will also show that your property continues to sustain its good record for production and reserves.

The price of silver has remained at the same figure prevailing in 1936, and has enabled us to attain the very satisfactory results already indicated. We realize that with all interested in silver mining, there is a natural curiosity and concern regarding the future of that industry. In answer to that spirit I cannot feel it is possible to say anything more than is contained in a reference to the subject, in our last annual report, as follows:

"Any discussion of the governmental policies and economic trends which now influence the 'silver market' would seem unnecessary, as they would have to be approached from the aspect of pure theory and speculative opinion, and from which no comprehensive judgment may be derived."

In discussing the financial elements of this report, I am following the formula used heretofore.

Silver production during 1937 was:
3,211,296$^{09}/_{100}$ ounces, compared with
3,104,506$^{94}/_{100}$ ounces, in 1936, an increase of
106,789$^{15}/_{100}$ ounces.

Gold production for 1937 was:
21,552$^{884}/_{1000}$ ounces, compared with
17,981$^{520}/_{1000}$ ounces, in 1936, an increase of
3,571$^{364}/_{1000}$ ounces.

The average cost per ounce for producing silver in 1937 was $.16139, compared with $.21263 in 1936, a decrease of $.05124.

The average price obtained in 1937 for silver was $.45115, compared with $.45338, a decrease of $.00223.

The average price obtained for our gold production in 1937 was $35.00 per ounce, compared with $35.0179, a decrease of $.0179.

Our Operating Expenses in 1937 were $1,104,304.73, compared with $1,129,163.91, a decrease of $24,859.18.

The New York Administration and General Expenses in 1937 were $78,836.48, compared with $77,117.16, an increase of $1,719.32.

The Net Profit for 1937 carried to Surplus was $887,003.72, compared with $768,243.64 in 1936, an increase of $118,760.08.

We have paid in dividends from earnings for the year 1937, $833,525.09, or $4.425 a share, compared with $734,631.30 for 1936, or $3.90 a share, an increase of $.525 a share.

The earnings per share in 1937 were $4.7089, compared with $4.0784 in 1936, an increase of $.6305 a share.

Our Income from Investments and sundry items in 1937 was $77,337.69, compared with $101,215.94 in 1936, a decrease of $23,878.25. This decrease is accounted for by the following facts: (1) a reduction in the total of securities owned, (2) lower earning rates of interest, and (3) that in 1936, we collected certain arrearages of preferred stock dividends, which were not duplicated in 1937.

Our Gross Income (Operations and Investments, etc.) was $1,007,842.20, of which "Operations" contributed $92\frac{33}{100}\%$, and "Investments" $7\frac{67}{100}\%$.

The Surplus on December 31, 1937, was.....$2,133,774.10,
compared with $2,241,425.74

at December 31, 1936, a decrease of.....$ 107,651.64,
which is accounted for by an additional recession between the cost and market value of securities owned by the Company.

The cost of the securities held by the Company on December 31, 1937 (exclusive of its own stock) was $1,664,457.52, and the market value as of that date computed by our auditors was $1,311,935.50, or a difference of $21\frac{18}{100}\%$. The difference between cost and market value of our securities at the end of the preceding year was $6\frac{18}{100}\%$, showing that there took place during the year 1937 a further shrinkage in values of 15%. This shrinkage of market values of our securities during 1937 compares with a diminution in market values during 1937 of all outstanding securities traded in on the New York Stock Exchange of $22\frac{4}{10}\%$. (New York Stock Exchange Bulletin, January, 1938, Vol. IX, No. 1.)

INTEREST IN PROPERTIES IN NICARAGUA

It was stated in the annual reports for the years 1935 and 1936, and also discussed at the Annual Meetings of the Stockholders in 1936 and 1937, that we had, with others, acquired an option on some gold mining properties in Nicaragua. These properties were the Bonanza Group of Mines, and those adjoining belonging to the Eden Mining Company and Tunky Transportation and Power Company, controlled by Benj. C. Warnick & Company, Limited, of Wilmington, Delaware. The original option was obtained August 2, 1935, but was not to become operative until title to the Bonanza Group had been perfected, which was not accomplished until June 12th, 1936, and the original option was then merged into one bearing date of July 15th, 1936.

providing for an examination period of eighteen months, subject to extension under certain conditions. Associated with us in the procurement of, and all rights under the option, on the following bases, were the

American Smelting and Refining Company	53 9/10%	interest
Premier Gold Mining Company	10 %	"
Terra Nova Properties Limited	5 %	"
H. A. Guess and this Company	1 1/10%	"
	30 %	"

There have also been acquired by purchase the properties of the Constancia Consolidated Incorporated, the Experiencia Mine, and an option on the Lone Star Mine. All the properties thus far mentioned are contiguous and subject, if desirable, to a single controlled operation.

On January 14th, 1938, it was decided to exercise the options referred to; the properties thereunder, with those acquired by purchase, to be transferred to a new company, as provided in the option agreement. This new company is the Neptune Gold Mining Company, organized under the laws of the State of Delaware, with a capital stock of 20,000 shares of no par value. Its officers are:

Harry A. Guess,	President,
William A. Prendergast,	Vice-President,
Forrest G. Hamrick,	Vice-President,
John C. Emison,	Treasurer,
Edwin C. Corson,	Assistant Treasurer,
George A. Brockington,	Secretary,
Howard L. Goodenough,	Assistant Secretary.

And its Directors:

Harry A. Guess,
William A. Prendergast,
Forrest G. Hamrick,
Clyde M. Spargo,
Richard F. Goodwin.

It is the judgment of your Board of Directors, fully concurred in by those associated with us in the option, that the course outlined above is in the interests of all concerned. All the properties have been transferred to the new company.

Under the terms of the option agreement, our associates and ourselves are to receive ten-year debentures bearing 5% interest covering all expenditures, and the Warnick Company is to receive one-ninth of the total of debentures issued to our associates and us, for expenditures on certain of the properties, as part payment of their interest in those properties. These debentures with interest are to be paid before any dividends on the common stock

are paid. The stock interests in the Neptune Gold Mining Company are as follows:

American Smelting and Refining Company	45.815%
New York and Honduras Rosario Mining Company	25.50 %
Benj. C. Warnick & Company, Limited	15.00 %
Premier Gold Mining Company	8.50 %
Terra Nova Properties Limited	4.25 %
H. A. Guess	.935%

The participants in the option, in accordance with their respective interests, have up to February 12, 1938, made total outlays and provided funds for future expenditures of Neptune Gold Mining Company amounting to $1,405,841.20. This company's proportion (30%) is $421,752.36, for which it has received debentures, and has also received a Certificate of Stock in the new company of 5100 shares, being 25½% of the total stock issue of 20,000 shares. In the amount of debentures received, $421,752.36, there is included the outlays by us to December 31, 1937, of $290,399.48 as shown in the Balance Sheet which is a part of this report.

In order to provide a mill (300 tons capacity), a power plant, and such additional facilities as may be necessary to put the property in operation, the new company will have to expend about $600,000, additional, bringing the total investment to approximately $2,000,000., which is the figure contemplated in the earliest estimates. It is expected that the property will be in operation the latter part of this year.

Mr. John Ward Williams, who has been connected with the American Smelting and Refining Company interests for a number of years, and who has had successful experience in Mexico, Venezuela, Ecuador, New Guinea, and other tropical countries, will be the General Manager, and is now at the property.

There is submitted with this report and made a part hereof:

1. A Comparative Statement of Operations for the years 1937 and 1936;

2. A Comparative Income and Profit and Loss Statement for the years ended December 31, 1937, and December 31, 1936;

3. A Balance Sheet for the year ended December 31, 1937;

4. A Statement of the Surplus Account for the year ended December 31, 1937;

5. A list of the Securities held by this Company December 31, 1937;

6. A Table showing Bullion Production and Dividend Distribution to Stockholders from the organization of the Company, including all the dividends paid from the earnings of the year 1937.

Respectfully submitted,

WM. A. PRENDERGAST,

President.

Comparative Statement of Operations
For the Years 1937 and 1936

For the purpose of comparison, we show as follows, details pertaining to mine production and operation during the past two years.

	Year 1937	Year 1936	Increase *Decrease
Total sales value of Gold and Silver recovered	$2,203,125.13	$2,037,208.11	$165,917.02
Tons of ore milled	162,500.	166,800.	*4,300.
Ounces of silver recovered	3,211,296.09	3,104,506.94	106,789.15
Number of ounces of Silver recovered per ton of ore	19.76182	18.61215	1.14967
Sales value of Silver recovered	$1,448,774.20	$1,407,532.07	$ 41,242.13
Average sales value of Silver per ounce	$ .45115	$ .45338	$ *.00223
Average cost of Silver per ounce	$ .16139	$ .21263	$ *.05124
Average profit on Silver per ounce	$ .28976	$ .24075	$ .04901
Value of Silver recovered per ton of ore	$ 8.9155	$ 8.4385	$ .4770
Average cost of Silver per ton of ore	$ 3.1893	$ 3.9576	$ *.7683
Average profit on Silver recovered per ton of ore.	$ 5.7262	$ 4.4809	$ 1.2453
Ounces of Gold recovered	21,552.884	17,981.520	3,571.364
Number of ounces of Gold recovered per ton of ore.	.13263	.10780	.02483
Total sales value of Gold recovered	$ 754,350.93	$ 629,676.04	$124,674.89
Average sales value of Gold per ounce	$ 35.00	$ 35.0179	$ *.0179
Value of Gold recovered per ton of ore	$ 4.6422	$ 3.7750	$ .8672
Number of bars of Bullion shipped from mine	1,902.	1,867.	35.

Income and Profit and Loss Statement

For the Years Ended Dec. 31, 1937, and Dec. 31, 1936

	Year 1937	Year 1936	Increase *Decrease
Production of Gold and Silver	$2,203,125.13	$2,037,208.11	$165,917.02
Less freight and expenses on bullion	89,479.41	83,517.81	5,961.60
OPERATING INCOME	$2,113,645.72	$1,953,690.30	$159,955.42
Operating expenses	1,104,304.73	1,129,163.91	*24,859.18
MINE OPERATING PROFIT	$1,009,340.99	$ 824,526.39	$184,814.60
New York administrative and general expenses	78,836.48	77,117.16	1,719.32
NET OPERATING PROFIT	$ 930,504.51	$ 747,409.23	$183,095.28
Add income from investments, etc.	77,337.69	101,215.94	*23,878.25
	$1,007,842.20	$ 848,625.17	$159,217.03
Less other deductions from income (Note A)	15,000.44	10,442.22	4,558.22
PROFIT BEFORE TAXES ON INCOME AND PROVISION FOR DEPLETION	$ 992,841.76	$ 838,182.95	$154,658.81
Federal taxes on income (including excess profits tax of $11,347.23 in 1937)	103,309.08	67,473.65	35,835.43
	$ 889,532.68	$ 770,709.30	$118,823.38
Appropriated for depletion from earnings (Note B)	2,528.96	2,465.66	63.30
NET PROFIT	$ 887,003.72	$ 768,243.64	$118,760.08
NOTE A: Other deductions from income include:			
Investigations of outside properties (Note C)	$ 4,144.49	.....	$ 4,144.49
Federal capital stock tax and New York State franchise tax	7,555.21	5,320.85	2,234.36
Amortization of premium paid on United States Government securities	1,488.67	3,263.66	*1,774.99
Sundry items	1,812.07	1,857.71	*45.64
	$ 15,000.44	$ 10,442.22	$ 4,558.22

NOTE B: Beginning with the year 1932, depletion has been taken in tax returns on a percentage basis in accordance with respective Revenue Acts. Entries recording depletion as they affect the older portion of the property are carried in the general accounts. Depletion deductions on ore mined from the newer discoveries, which newer discoveries are not carried on books, are made for income tax purposes. No provision is required for federal surtax on undistributed profits, as dividends paid in 1936 and 1937 are in excess of adjusted taxable net income for these years.

NOTE C: Expenditures during 1936 in the net sum of $87,734.52 for investigations of outside properties were charged to earned surplus in that year; during 1937 $65,185.46 of this amount has been restored to books as per accompanying analysis of surplus account.

BALANCE

DECEMBER

ASSETS

Mines, Plant and Equipment			
Mines, real estate and concessions	$3,000,000.00		
Less allowance for depletion of mines	2,184,771.07	$ 815,228.93	
Buildings, machinery and equipment	$2,035,845.31		
Less allowance for depreciation	1,594,311.53	441,533.78	$1,256,762.71
Current Assets			
Cash		$ 242,523.93	
Bullion at smelters and in transit—less allowance for expenses		306,505.62	
U. S. Government and other marketable securities—(at cost, less amortization of premium paid on government securities)	$1,664,457.52		
Less reserve to reduce to quoted market prices	352,522.02		
	$1,311,935.50		
Interest accrued on bonds	9,194.83	1,321,130.33	
Account receivable		87,647.63	
Broken ore in stopes and mill bins—(at cost)		242,411.02	
Inventories—materials and supplies—(at cost)		280,145.19	2,480,363.72
Other Assets			
Interest in Nicaraguan Joint Mining Venture—(pro-rata share of advances made to December 31, 1937)		$ 290,339.48	
Loans and advances—Government of Honduras and Municipalities		19,574.52	
Other investments—at cost		5,000.00	
Sundry accounts receivable		375.72	315,289.72
Deferred Charges			
Inventories of supplies, prepaid insurance, taxes, etc.			148,893.21
			$4,201,309.36

SHEET

31, 1937

LIABILITIES

Current Liabilities			
Drafts payable		$ 33,395.37	
Accounts payable		42,712.81	
Accrued taxes		4,448.00	
Provision for federal income and excess-profits taxes—estimated		103,309.08	$ 183,865.26
Capital			
CAPITAL STOCK (par value $10.00 per share)			
Authorized and issued— 200,000 shares	$2,000,000.00		
Less in treasury— 11,633 shares	116,330.00		
Outstanding ....188,367 shares		$1,883,670.00	
Surplus			
Earned	$1,574,876.76		
Appreciation of mines $1,500,000.00			
Less depletion earned 941,102.66	558,897.34	2,133,774.10	4,017,444.10
			$4,201,309.36

Analysis of Surplus
For the Year Ended December 31, 1937

EARNED SURPLUS

BALANCE—DECEMBER 31, 1936—PER FORMER REPORT			$1,679,999.44
ADDITIONS			
Net earnings for the year after provision for federal income and excess-profits taxes—per statement of income and expense		$887,003.72	
Expenditures for investigation of Nicaraguan properties, written off in prior years, now restored to books as option has been exercised:			
Charged to income in 1935	$ 6,529.75		
Charged to surplus in 1936	65,185.46	71,715.21	958,718.93
			$2,638,718.37
DEDUCTIONS			
Dividends paid, totaling $4.42½ per share:			
March, 1937—$.75 per share	$141,275.25		
June, 1937—$.87½ per share	164,822.24		
September, 1937—$1.15 per share	216,622.05		
December, 1937—$1.65 per share	310,805.55	$833,525.09	
Additional federal income tax for the year 1935		897.82	
Provision to reduce book value of marketable securities to quoted market value at December 31, 1937		229,418.70	1,063,841.61
BALANCE—DECEMBER 31, 1937—PER BALANCE SHEET			$1,574,876.76

SURPLUS FROM APPRECIATION OF MINES

BALANCE—DECEMBER 31, 1936—PER FORMER REPORT	$ 561,426.30
Less allowance for depletion on appreciation of mine valuation	2,528.96
BALANCE—DECEMBER 31, 1937—PER BALANCE SHEET	$ 558,897.34
TOTAL SURPLUS—DECEMBER 31, 1937	$2,133,774.10

Marketable Securities

December 31, 1937

	Par Value	Market Value	
United States Government Securities			
Treasury bonds:			
3¼% due April 15, 1946-1944.....	$100,000.00	$107,062.50	
3⅜% due June 15, 1947-1943.....	80,000.00	86,075.00	
3 % due June 15, 1948-1946.....	50,000.00	52,656.25	
2¾% due March 15, 1951-1948.....	100,000.00	102,093.75	
2½% due December 15, 1953-1949..	50,000.00	49,843.75	
2¾% due September 15, 1959-1956..	100,000.00	100,937.50	
2⅞% due March 15, 1960-1955.....	100,000.00	101,906.25	
Treasury notes, 1¾% Series "A" due 1942	42,500.00	43,243.75	
Federal Farm Mortgage Corporation bonds, 3%, due May 15, 1949-1944..	75,000.00	77,812.50	$721,631.25
New York State Bonds			
2¾% Emergency Unemployment Relief due July 1, 1938	10,000.00	$ 10,100.00	
2¾% Emergency Unemployment Relief due July 1, 1939	10,000.00	10,275.00	
2¾% Emergency Unemployment Relief due July 1, 1940	10,000.00	10,387.50	
3% General State Improvement due July 1, 1941	10,000.00	10,525.00	41,287.50
Domestic Railroad Bonds			
Chicago and Northwestern Railway Co. 1st and Ref. Mtge. 4½% Series "C" due May 1, 2037	25,000.00	$ 2,531.25	
Chicago, Rock Island and Pacific Railway Co. 1st and Ref. Mtge. 4% due April 1, 1934	50,000.00	4,125.00	
New Orleans, Texas and Mexico Railway Co. 1st Series "A" 5½% due April 1, 1954	25,000.00	7,687.50	
New York, Chicago and St. Louis R. R. Co. Ref. Mtge. Series "C" 4½% due September 1, 1978	50,000.00	30,875.00	
St. Louis and San Francisco Railway Co., Prior Lien Mtge. Bonds, Series "B" 5% due July 1, 1950.....	50,000.00	6,250.00	51,468.75
Domestic Public Utility Bonds			
Birmingham Gas Co., Gold Notes, 6%, due October 1, 1938	50,000.00	$ 38,000.00	
Brooklyn Manhattan Transit Corp. Rapid Transit Collateral Trust Bonds, 4½%, due May 1, 1966.....	50,000.00	25,250.00	
Electric Power and Light Corp., 5% Gold Debentures due February 1, 2030	50,000.00	33,750.00	

Domestic Public Utility Bonds (Continued)

Joplin Water Works Co., 1st Mtge. 5% Gold Bonds, Series "A", due March 1, 1957	25,000.00	25,875.00	
Mississippi Power and Light Co. 1st Mtge. 5% Gold Bonds due December 1, 1957	50,000.00	43,000.00	
National Power and Light Co., 5% Gold Debenture, Series "B", due May 1, 2030	50,000.00	36,562.50	
Northern States Power Co., 1st and Ref. Mtge. 3½% due February 1, 1967	50,000.00	49,562.50	$252,000.00

Stocks	Number of Shares		
Public Utility Preferred			
Arkansas Power and Light Co., $6.00 cumulative preferred stock, no par	500	$ 32,500.00	
Commonwealth and Southern Corp., $6.00 cumulative preferred stock, no par	550	21,037.50	
Florida Power and Light Co., $7.00 cumulative preferred stock, no par	500	18,125.00	
Iowa Southern Utilities Co. of Delaware, 7% cumulative preferred stock, par value $100.00	500	18,250.00	
Jersey Central Power and Light Co., 5½% cumulative preferred stock, par value $100.00	500	32,500.00	
Public Service Co. of Indiana, $7.00 cumulative prior preferred stock, no par	500	12,000.00	134,412.50
Common Stocks, Etc.			
American Chicle Co., common stock, no par	1,000	$ 94,000.00	
Home Insurance Co., capital stock, par value $5.00	621	15,835.50	
Sundry		1,300.00	111,135.50
			$1,311,935.50

Report of Auditors

New York and Honduras Rosario Mining Company:

We have made an examination of the balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY as at December 31, 1937, and of the statements of income and surplus for the year ended at that date. In connection therewith, we examined or tested accounting records of the Company and other supporting evidence at the New York office and at the mine office in Honduras, including minutes of stockholders' and directors' meetings, and obtained information and explanations from officers and employees of the Company; we also made a general review of the accounting methods and an audit of the operating and income accounts for the year.

Cash, securities, and bullion were verified by actual count, inspection of certificates and documents, or by direct communication with depositories. Provision for depletion and depreciation charged to income as in the past, represents the maximum amount allowable under federal revenue acts applicable to properties carried on the books.

The Company has charged against income account its 1937 expenditures for investigations of outside properties; for the year 1936 expenditures for such purposes were charged to earned surplus.

In our opinion, based upon our examination, the accompanying balance sheet and related statements of income and surplus show the financial position of the Company at December 31, 1937, and the results of its operations for the year ended at that date. Further, it is our opinion that the statements have been prepared in accordance with accepted principles of accounting, and, with the exception of the above noted change with respect to charges for expenditures for investigations of outside properties, on a basis consistent with the preceding year.

ERNST & ERNST.

New York, N. Y.
February 21, 1938.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
1925	1,763,023.16
1926	1,601,429.35
1927	1,341,300.06
1928	1,500,233.98
1929	1,477,710.79
1930	1,315,821.38
1931	1,403,104.20
1932	1,355,117.43
1933	1,910,740.17
1934	1,965,520.68
1935	2,109,313.47
1936	2,037,208.11
1937	2,203,125.13
	$56,411,656.07

Distribution to Stockholders

1887	No. 1	$ 37,500— 2½%	($ .25 per share) Dividend
1888	Nos. 2 to 8	112,500— 7½%	(.75 per share) Dividend
1889	Nos. 9 to 14	97,500— 6½%	(.65 per share) Dividend
1891	Nos. 15 to 17	45,000— 3%	(.30 per share) Dividend
1892	Nos. 18 to 22	187,500—12½%	(1.25 per share) Dividend
1893	Nos. 23 to 26	150,000—10%	(1.00 per share) Dividend
1896	Nos. 27 to 30	60,000— 4%	(.40 per share) Dividend
1897	Nos. 31 to 42	180,000—12%	(1.20 per share) Dividend
1898	Nos. 43 to 50	120,000— 8%	(.80 per share) Dividend
1899	Nos. 51 to 63	195,000—13%	(1.30 per share) Dividend
1900	Nos. 64 to 78	255,000—17%	(1.70 per share) Dividend
1901	Nos. 79 to 95	255,000—17%	(1.70 per share) Dividend
1902	Nos. 96 to 100	75,000— 5%	(.50 per share) Dividend
1903	No. 101	15,000— 1%	(.10 per share) Dividend
1904	Nos. 102 to 110	135,000— 9%	(.90 per share) Dividend
1905	Nos. 111 to 124	195,000—13%	(1.30 per share) Dividend
1906	Nos. 125 to 142	285,000—19%	(1.90 per share) Dividend
1907	Nos. 143 to 155	195,000—13%	(1.30 per share) Dividend
1908	Nos. 156 to 167	180,000—12%	(1.20 per share) Dividend
1909	Nos. 168 to 175	120,000— 8%	(.80 per share) Dividend
1910	Nos. 176 to 181	120,000— 8%	(.80 per share) Dividend
1911	No. 182	45,000— 3%	(.30 per share) Dividend
1912	Nos. 183 to 184	70,000— 3½%	(.35 per share) Dividend
1913	Nos. 185 to 189	220,000—11%	(1.10 per share) Dividend
1914	Nos. 190 to 194	260,000—13%	(1.30 per share) Dividend
1915	Nos. 195 to 199	280,000—14%	(1.40 per share) Dividend
1916	Nos. 200 to 207	400,000—20%	(2.00 per share) Dividend
1917	Nos. 208 to 212	260,000—13%	(1.30 per share) Dividend
1917	Nos. 1 and 2	140,000— 7%	(.70 per share) Amortization
1918	Nos. 213 to 216	200,000—10%	(1.00 per share) Dividend
1918	Nos. 3 to 6	200,000—10%	(1.00 per share) Amortization
1919	Nos. 217 to 220	200,000—10%	(1.00 per share) Dividend
1919	Nos. 7 to 10	200,000—10%	(1.00 per share) Amortization
1920	Nos. 221 to 226	320,000—16%	(1.60 per share) Dividend
1920	No. 11	40,000— 2%	(.20 per share) Amortization
1922	Nos. 227 to 230	200,000—10%	(1.00 per share) Dividend
1923	Nos. 231 to 235	250,000—12½%	(1.25 per share) Dividend
1924	Nos. 236 to 241	350,000—17½%	(1.75 per share) Dividend
1925	Nos. 242 to 249	400,000—20%	(2.00 per share) Dividend
1926	Nos. 250 to 257	400,000—20%	(2.00 per share) Dividend
1927	Nos. 258 to 265	400,000—20%	(2.00 per share) Dividend
1928	Nos. 266 to 274	450,000—22½%	(2.25 per share) Dividend
1929	Nos. 275 to 283	500,000—25%	(2.50 per share) Dividend
1930	Nos. 284 to 290	371,677—18¾%	(1.87½ per share) Dividend
1931	Nos. 291 to 297	364,159—18¾%	(1.87½ per share) Dividend
1932	Nos. 298 to 303	283,874—15%	(1.50 per share) Dividend
1933	Nos. 304 to 312	659,324—35%	(3.50 per share) Dividend
1934	Nos. 313 to 321	753,468—40%	(4.00 per share) Dividend
1935	Nos. 322 to 330	800,559—42½%	(4.25 per share) Dividend
1936	Nos. 331 to 337	734,632—39%	(3.90 per share) Dividend
1937	Nos. 338 to 341	833,525—44¼%	(4.425 per share) Dividend
		$13,601,219	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 284, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distributions, Nos. 1 to 11, inclusive, were paid on Capital Stock of..... 2,000,000.00
Dividends 285 to 341, inclusive, were paid on outstanding capital stock.

GENERAL MANAGER'S REPORT

January 1, 1938.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company,
120 Broadway,
New York, N. Y.

Gentlemen:

The following report covers the more important phases of your mining operations, together with vital statistics as compiled at the close of the year 1937.

Production

	1937	1936
Dry Tons Treated	162,500	166,800
Average per ton—Troy ounces Silver milled at the Mine	21.9945	20.3898
Average per ton—Troy ounces Gold milled at the Mine	.1457	.1125
Total Troy ounces Silver milled at the Mine	3,574,116	3,401,024
Total Troy ounces Gold milled at the Mine	23,675	18,765
Total Troy ounces Silver produced at the Mine	3,210,337	3,104,174
Total Troy ounces Gold produced at the Mine	21,717	17,878
Average per ton—Troy ounces Silver produced at the Mine	19.7560	18.6102
Average per ton—Troy ounces Gold produced at the Mine	.1336	.1072
Ratio of Gold to Silver	1:148	1:174
Bars of Doré Bullion	1,902	1,867
Bullion Fineness of Silver	959.61	964.67
Bullion Fineness of Gold	6.492	5.556
Custom Ore & Gold Bullion—not included above		
Troy Ounces Silver	....	....
Troy Ounces Gold	40.195	512.1278

Above production figures are based on local assays and not on smelters' returns.

Because of less favorable power conditions it was impossible to equal the tonnage milled the previous year by 4,300 tons.

Mill heads averaged 22 ozs. silver as against 20 and a fraction the previous year, netting slightly over 100,000 ounces additional silver.

Gold production for 1937 (21,717 ozs.) establishes a new record for the Rosario Mine.

Honduras Operating Costs in U. S. Currency

	YEAR — 1937		Total Costs	YEAR—1936		Total Costs	Cost Per Ton 1937	Cost Per Ton 1936	Cost Per Ounce of Silver 1937	Cost Per Ounce of Silver 1936
MINING										
Labor		$350,310.15			$329,117.22					
Supplies		284,956.70			246,324.99					
Power		4,525.98			5,892.70					
Depreciation, etc.		9,048.51			9,244.05					
ORE MINED AND MILLED										
First of Year	$186,159.00			$196,393.82						
Last of Year	242,411.02	Cr. 56,252.02	$ 592,589.32	186,159.00	10,234.82	$ 600,813.78	$3.64	$3.60	$.1845	$.1935
MILLING										
Labor		$ 70,510.11			$69,835.66					
Supplies		188,251.16			200,242.46					
Power		10,746.83			11,579.67					
Depreciation, etc.		38,966.56			39,982.24					
			308,474.66			321,640.03	1.90	1.93	.0960	.1036
ADMINISTRATION										
Labor and Supplies		$179,502.14			$179,466.36					
Depreciation, etc.		12,656.15	192,158.29		12,243.74	191,710.10	1.18	1.15	.0600	.0618
			$1,093,222.27			$1,114,163.91	$6.72	$6.68	$.3405	$.3589
Mine Yearly Concession Expense			11,082.46			15,000.00	.07	.09	.0034	.0048
			$1,104,304.73			$1,129,163.91	$6.79	$6.77	$.3439	$.3637
Credit for Gold			754,350.93			629,676.04	4.64	3.77	.2350	.2028
			$ 349,953.80			$ 499,487.87	$2.15	$3.00	$.1089	$.1609

Honduras Operating Costs

Operating Costs as given in detail on Page 18 show a decrease from 1936 of $24,859.18.

Average Number of Men Per Day

	1937	1936	
Number of working days	306	306	
Mine	736.89	676.58	Men
Mill	75.67	73.94	"
Administration	33.00	28.53	"
Surface and Construction	70.76	71.79	"
Hotel	5.00	5.00	"
Laboratory	2.62	2.17	"
Electrical	44.38	44.25	"
Mechanical	35.61	37.06	"
Police, San Juancito	27.00	27.08	"
Police, Rosario	20.00	20.00	"
Totals	1,050.93	986.40	"

THE MINE

Ore Reserves

Comparison of the Active Ore Reserves at the beginning of 1938 and as of a year ago is set down immediately below for more ready reference. The detail for 1937 is shown in Annex "A."

Comparative Summary—Active Ore Reserves

	Tons of Ore Plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1938	705,016	27.64	.1871	19,491,275	131,916
January 1, 1937	649,922	29.18	.1972	18,962,858	128,172
Increase	55,094			528,417	3,744
Decrease		1.54	.0101		

Reserves are based on silver at 40 cents and gold at $35.00 per Troy ounce.

Continued development of known veins and branches from them has been the chief contributing factor in maintaining reserves in such a satisfactory condition.

Although heavy exploration work in the search for new veins has been encouraging, insufficient vein development has as yet been done to warrant considering any new veins as tangible assets at this date.

Comparative Summary—Inactive Ore Reserves

	Tons of Ore Plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1938	40,654	14.	.05	553,319	1,941
January 1, 1937	39,488	13.76	.0482	543,539	1,905
Increase	1,166	.24	.0018	9,780	36

Ore Production

For more ready reference the source of ore production is summarized, from Annex "D", immediately below:

	1937	1936	1935	1934	
From Stoping	122,669	121,996	105,548	98,655	tons
From Development Excavations	39,679	44,802	51,327	56,330	"
Total	162,348	166,798	156,875	154,985	"

Ore from development shows a further percentage decrease, 24.4%, as against 26.8% last year.

Exploration and Operating Connections

The following summary of Annex "C", showing 2,614 increased footage, with less development ore returns, illustrates the chief reason for the added mining costs during 1937.

Year	Drifts	Cross-cuts	Raises	Winzes	Total Ft.
1937	13,591	9,935	8,578	33	32,137
1936	14,072	9,020	6,317	114	29,523
Increase					2,614

	1937	1936	1935	1934
Development Feet Driven	32,137	29,523	34.945.5	31,837

Total exploration and development footage in 1937 was exceeded only during 1935.

Approximately 6,000 feet of purely exploration crosscutting brought to light several interesting new mineralized sections.

Operating Crosscuts & Raises
Below the Peña Blanca Level

The main ore pass of the Santa Fe section known as No. 8 was continued to the Lower 300 ft. level during the early part of the year. It has proved of decided advantage in lowering tramming costs on the considerable tonnage extracted from development and stoping operations on this particular level. Results of development on the Lower 200 ft. level do not warrant, at the present time, continuing the ore pass to that level.

The material handling raise for the Santa Fe section, as mentioned in the report of 1936, was started in Block 88, and is now completed from the Lower 650 to the Lower 500 ft. levels and partially completed from the Lower 500 to the Lower 300 ft. levels. This raise, known as Shaft Raise No. 3, should be in operation to the Upper 150 or Peña Blanca level by the end of 1938.

An exploration and operating crosscut on the Lower 500 ft. level was driven in a northwesterly direction from the San Benito. It cut the Santa Fe No. 1 vein in Block 88 and permitted of active development of this vein on that level.

An operating crosscut on the Lower 200 ft. level was started southwest from the San Benito vein and was driven 160 feet. It will give this level access to the No. 3 material handling raise when the latter is completed. An extension of this crosscut is planned to prove the upward extension of the Santa Fe vein No. 2.

Operating Crosscuts & Raises
Above the Upper 150 ft level

The material handling raise for the Jucuara No. 1-Fortuna vein above the Peña Blanca level in Block 76 was continued to the Upper 550 ft. level. At that point a hoist station has been prepared. Good grade ore encountered on the Upper 550 and in the raises driven from this horizon to the Upper 650 ft. level of the Jucuara vein No. 1 branch, brought about this change in the location of the hoist station. It is now proposed to continue this material handling raise to the surface, a distance of 260 feet, and thereby facilitate the handling of timber for these upper levels.

Exploration Crosscuts
Below the Upper 150 ft. level
Lower 400 Esperanza Crosscut

This crosscut, having been driven 80 feet, is now completed and ventilation raises have been started to connect with the Jutiapa surface adit. Two raises have reached the Lower 300 horizon and a further raise is being driven from this level. Work in these raises has been slow, owing to very wet and loose ground.

Work on the surface adit was speeded up by the installation of a Diesel driven air compressor and the adit was driven 610 feet to its objective.

Lower 300 Independencia Crosscut

This crosscut, in a northerly direction, was started in Block 83 to verify results as shown by diamond drill hole No. 11 and to explore the ground between the westerly extremes of the Independencia and San Blas veins. In advancing this crosscut 140 feet several interesting stringers have been cut which may prove of importance when opened up.

Lower 300 Southwest Vein

The crosscut from the Southwest vein in Block 72 was driven 515 feet due north, resulting in encountering one or two small stringers, apparently of minor value. The crosscut will be driven a further 500 feet to eliminate the territory remaining between the West and the old Crucero crosscuts.

The crosscut opposite the Southwest vein north crosscut was continued for a further 30 feet without intersecting anything of interest. It may be continued as exploration when more favorable prospect crosscuts are completed.

A raise from the Santa Gertrudis vein in Block 71 was connected to the Zero level and is being continued to the Upper 150 or Peña Blanca level where it should connect in the early part of 1938. Some drifting was done on this vein on the Lower 200 ft. level, with, however, disappointing results. On reaching the Zero level of the Santa Gertrudis, access to the old Southwest winze was found to be closed, owing to caved ground. This will be opened on completion of the raise to the Peña Blanca level which raise will be advantageous in the handling of material and labor for proposed work on the Zero level and below.

Lower 300 Jucuara No. 4

The crosscut being driven from Jucuara No. 4 vein in a southerly direction to confirm the results of diamond drill hole No. 18 on the Lower 300 ft. level, was driven 460 feet during 1937. Approximately on the strike, but slightly to the north of the western termination of the Salvador vein, an interesting network of stringer veins in faulted country was discovered; these stringers are in the process of being developed to the west where pockets of good ore are being encountered. The crosscut south will be continued to cut any further possible westerly extension of the Salvador vein.

Zero Jucuara No. 1

This crosscut, which was commenced in Block 76, was driven 230 feet in 1937 and was disappointing in results. Although it was discontinued during the latter part of the year it warrants further driving which will be carried out when more important crosscuts have been terminated.

Lower 200 Jucuara No. 1

An exploration crosscut was started in Block 69 in a southeasterly direction on the Lower 200 ft. level in the vicinity of the Carmen No. 2 vein to prove the extension downward of the Carmen Main vein, to explore the ground between the Carmen Main vein and the Veta No. 4 South, and to cut the downward extension of the latter. This crosscut was advanced 222 feet, cutting the downward extension of the Carmen Main vein at a distance of 130 feet. The small amount of development work done on the Carmen shows some good grade ore but insufficient work has been done to allow of a definite statement as to the possibility of this making commercial ore. The crosscut will be given special consideration during 1938 in order to explore the downward extension of the Veta No. 4 South.

Lower 300 Jucuara No. 1

On the Lower 300 ft. level in the vicinity of the Jucuara No. 1 vein in Block 74 a crosscut was advanced 250 feet in an easterly direction. Some interesting stringers have been crossed on which work is being done to prove their extent and the crosscut will be continued to prove up the section between the Jucuara No. 1 vein and the northern extension of the main Carmen vein.

Lower 200 Salvador-San Blas

From the Salvador vein on the Lower 200 level in Block 79 a crosscut was advanced 180 feet in a southeasterly direction to cut the extension downward of the San Blas No. 2 and to examine the ground between the Salvador and San Blas Main veins. The San Blas No. 2 vein was cut at 100 feet from the Salvador from which point the San Blas No. 2 vein was actively developed, resulting in a small addition of fair grade ore to the active reserves under San Blas No. 2.

The crosscut will be continued to its objective during 1938.

Exploration Crosscuts
Above the Upper 150 ft. level
Upper 150 Jucuara-Salvador

This crosscut was continued 265 feet to the point necessary for ventilation connection from the lower levels. A crosscut southeast in Block 89 from this Jucuara-Salvador crosscut will be begun during 1938 to connect with the No. 3 material handling raise.

Upper 150 San Blas No. 2 South

This crosscut was continued, as planned, for a further 105 feet, and nothing of interest having been found, was stopped. Further work on this crosscut may be warranted.

Upper 150 Crosscut in
Vicinity of West Crosscut

It was proposed to start a crosscut northeast on the Upper 150 ft. level from the West crosscut in Block 76 together with a crosscut westward from the West crosscut in about Block 86. It was decided to postpone this work pending completion of the Lower 300 Southwest Crosscut North so as better to determine the most advantageous location for the Peña Blanca crosscuts. They are of importance to prove up the area east of the West main crosscut and north of the Southwest vein as well as virgin ground on the opposite side of the West crosscut. They will be commenced this year.

Upper 150 Aguacatal

Notwithstanding the difficulties of driving through the heavy ground met in this crosscut, to explore the Rosario side of the mountain south of the San Juancito River, an advance of 1,200 feet was made. Nothing of value has thus far been found. It is expected that another 1,000 feet will bring the face into ground more favorable for ore occurrence.

Lower 400 Aguacatal

Further study of a crosscut to demonstrate the possibilities of the country between the San Juancito and Escobales Rivers resulted in a surface crosscut—known as the Lower 400 Aguacatal —being commenced at approximately the same elevation as the Lower 400 ft. level. It was advanced in the sedimentaries a distance of 700 feet and is now showing signs of changing to igneous rock. Driving of it during 1938 will be expedited in order to determine the extent of ore bodies, if existing, in this particularly interesting section.

Upper 450 Jucuara No. 1

In Block 78, on the Upper 450 ft. level of the Jucuara No. 1 vein, a crosscut was advanced 200 feet in a northeasterly direction to cut the upward extension of the Santa Gertrudis No. 2 vein. This crosscut, having proved that the Santa Gertrudis No. 2 vein does not carry values at this horizon, was discontinued.

Also in Block 78 on the Upper 450 ft. level a crosscut was started in a southwesterly direction to explore the territory between the Jucuara No. 1 vein and the Salvador vein. The crosscut was advanced 310 feet, cutting a number of stringers of minor importance. The crosscut will be continued a further 100 feet to the Salvador vein.

An exploration crosscut in a northeasterly direction has been commenced from Block 79 on the Upper 450 ft. level to ascertain if ore extends to this level in the Jucuara No. 2 vein. It will also prospect the territory between the Jucuara No. 1 and the Jucuara No. 2 veins.

Aurora-Santa Elena Exploration

With the release of the Diesel portable compressor from the Jutiapa adit, the compressor was moved to the vicinity of the Aurora Mine south of our main underground workings.

The Clephane vein, which showed some promise when worked several years ago, was drifted upon 541 feet. As it was followed northwest the vein became stronger, but showed no commercial ore.

A crosscut from the Clephane was run in a northeasterly direction 677 feet. Nothing of interest was found.

Recovery of some of the old Aurora mine workings in the sedimentaries still further south indicates that the vein system and mineralization is not sufficiently attractive to warrant the expenditure of any further money on those old workings.

The compressor is being moved to explore what is considered more favorable country northeast of the town of Santa Lucia. At the same time some work will be done on the Santa Elena holdings where some fair silver ore was at one time mined.

General Exploration Plan
for the Year 1938

The main exploration program with the exception of the inclusion of two more exploration crosscuts will be practically the same of that for 1937, and apart from numerous short exploration crosscuts from the various veins, may be summarized as follows:

1. Continuous driving of the Upper 150 Aguacatal crosscut together with the Lower 400 Aguacatal and a branch crosscut south from it.
2. Completion of the Lower 300 Southwest crosscut, proving the unexplored territory remaining between the West and the old Crucero crosscuts.
3. A crosscut on the Upper 450 Jucuara vein No. 1 level in a northwesterly direction to prospect the upward extension of the Jucuara No. 2 vein and the intervening ground.
4. Active driving of a crosscut on the Lower 200 ft. level in a southeasterly direction from the Carmen vein until it intersects the extension downward of the Veta No. 4 South.
5. The crosscuts on the Peña Blanca level as captioned above "In Vicinity of West Crosscut."
6. A crosscut east from the Upper 450 Porvenir vein to explore the territory west of the Culebra vein.

VEIN DEVELOPMENT AND STOPING

Veins Worked in 1937

24 veins again produced the ore obtained in 1937, five of which contributed from development only. The bulk of the tonnage, amounting to 81%, came from Jucuara Nos. 1, 2, 3 and 4; Salvador; Santa Fe Nos. 1, 2 and 3, and San Benito No. 1. The remainder came from the Independencia, Jucuara No. 5, 56 Fault, San Benito No. 2, Southwest No. 2, San Blas No. 2, Santa Gertrudis No. 1, San Joaquin, Veta No. 4 South, Capitana, Fortuna, Porvenir, Veta No. 4 North, Santa Fe Main, and the Carmen veins.

Salvador Group

Salvador Vein

Tonnage amounting to 20,601 was extracted from the Salvador, a small proportion—1539 tons—being from development. The continuous development to the east from Block 80 on the Upper 250 ft. level on a hanging wall branch has disclosed a commercial body of ore of some 400 feet in length, thus adding further to the life of this record producer. From Annex "A" it will be seen that an unbroken reserve of 25,700 tons now exists.

Jucuara No. 1-Fortuna Vein

This was the greatest single producer for the year, contributing 30,543 tons, of which 24,856 came from stopes. As predicted in last year's report, development has shown that the ore extends to the Upper 650 ft. level on the Esperanza end. The probability of ore extending above that level is remote.

Stoping operations in Jucuara No. 1 may be slightly increased in 1938 over that of the past year to maintain a balanced silver and gold production from the entire mine.

Fortuna North Vein

Work on this vein was negligible. The Upper 450 ft. level of the Fortuna North was connected with the same level of the Porvenir vein in the latter part of the year. It is now proposed to take a stope up from the Upper 450 Fortuna which will indicate if further development is warranted on still higher levels. The connection from the Porvenir will afford easy outlet for ore extracted on the Fortuna North.

Independencia Group

Independencia Vein

This vein yielded 7,539 tons, 5,427 of which came from stopes. Development of branch veins on the Zero, Lower 200 and Lower 400 ft. levels has resulted in adding a further small term of life to this vein. 14,651 tons of good grade ore still remain.

San Blas No. 2 Vein

Intensive development work on the Zero and Lower 200 ft. levels with the necessary raises from the Lower 200 to the Zero level resulted in an addition of 8,848 tons of low grade ore to the active reserves. Although it may never be an important producer,

the favorable vein formation and its accessibility tends to cheap mining. For this reason it is placed in the active ore list notwithstanding the net per ton value is low even compared to some of the inactive reserves. It will be partly stoped this year.

Santa Fe Group

San Benito No. 1 Vein

Production amounted to 9,424 tons. Development, having been concentrated on the Lower 300 ft. level, resulted in gaining access to a considerable block of ore below the Lower 250 ft. level, netting a reserve of 6,372 tons. The work carried out in the upper reaches of this vein was mostly in faulted country and to gain further knowledge it is proposed to explore and develop from the Upper 350 ft. level on which only approximately 80 feet has been opened up.

San Benito No. 2 Vein

Production from this vein yielded 4,917 tons, of which 3,147 was furnished from development. Continuous development on the Lower 400 ft. level was the means of exposing a length of 460 feet of high grade ore, particularly rich in gold. In Block 94 on the Lower 400 ft. level a distinct change of rock occurred which is undoubtedly the same crushed zone which terminates to the west the Santa Fe No. 2 on the Lower 300 and Lower 400 as fully explained under Santa Fe No. 2 vein in the 1936 report.

The same condition has been already encountered on the Lower 300 ft. level of San Benito No. 2 cutting off values at that horizon. From the foregoing it will be readily realized that the western limits of this vein have probably been reached. As predicted in last year's report its reserves have been added to considerably, being augmented by 9,929 tons, making a total reserve on the San Benito No. 2 vein of 25,318 tons, with a very substantial increase in gold.

Santa Fe No. 1 Vein

This vein has now been developed on the Zero, Lower 200, Lower 300, Lower 400 and Lower 500 ft. levels, proving erratic in structure and width with badly faulted sections. A stope was worked from the Lower 300 to the Lower 200 level and proved to consist of some barren portions with pockets of exceptionally high grade ore. Production amounted to 8,981 tons, of which 6,494 came from development. 43,153 tons have been blocked out, averaging 22 ounces of silver per ton.

Development will be continued on the Lower 500 ft. level and above the Zero level to define the limits of the ore.

Santa Fe No. 2 Vein

Of the 13,506 tons produced, 12,069 came from stoping operations. 105 feet of development was done on the Lower 500 ft. level, exposing ore of fair grade, but as commented on in last year's report, the field for development on the Santa Fe No. 2 has been fairly well eliminated.

Santa Fe No. 3 Vein

As proposed, production was increased from this vein during 1937, 9,161 tons having been mined, which came, with the exception of 85 tons, from stopes. The policy of confining operations to steady stoping will be followed during the present year.

Jucuara Group

Jucuara No. 2 Vein

Production amounted to 22,870 tons. The Lower 500 ft. level, advanced some 1,000 feet, is now in the vicinity of the No. 56 Fault where it is expected the vein will terminate as on all other levels. By continuous driving on the Lower 500 and Lower 650 ft. levels, together with the necessary raises, 10,648 tons of ore came from development.

In spite of extracting 12,222 tons from stopes it will be noted that ore reserves in this vein show an increase over 1936.

Field for development on the Jucuara No. 2 vein is practically limited to the Lower 650 ft. level westward where low grade ore is still being developed.

Stoping operations for the present year will be on a conservative basis as for 1937.

Jucuara No. 3 Vein

By producing 7,990 tons, of which 7,832 came from stopes, the Jucuara No. 3 vein has been greatly depleted, leaving 10,204 tons only for its reserve, with little hope of adding to it.

Jucuara No. 4 Vein

The output of 8,569 tons consisted of 8,246 tons from stopes, with only 323 tons from development. The more important work of defining the limits of the Jucuara No. 2 vein on the Lower 500 ft. level precluded the search for the No. 4 vein on that level. Now that the western limits of the Jucuara No. 2 have been defined on the Lower 500, exploration for determining the downward extension of the Jucuara No. 4 will be started.

Jucuara No. 5 Vein

The small tonnage of 942 was derived entirely from stopes. It is probable that the small tonnage remaining will be mined during the present year.

No. 56 Fault Vein

Stoping operations yielded 4,687 tons. This vein will be worked on the same basis during 1938 as in the previous year.

Jucuara Veins—General

As foretold in the 1936 report, the development completed during the year has practically defined the limits of the Jucuara Nos. 2, 3, 4 and 5 veins. Work during the present year will be confined to small exploration crosscuts including a crosscut on the Lower 500 ft. level to cut the possible downward extension of the Jucuara No. 4.

Old Mine Group

Capitana Vein

The tonnage extracted from stopes on this vein amounted to only 149 tons, for the reason, as explained in the 1936 report, that it is proposed to eliminate the reserves remaining in the San Joaquin section before mining the small tonnage remaining in the Capitana.

San Joaquin Vein

Recovery of the Lower 300 ft. level gave access in the latter part of the year to the block of ore left in the western end of this vein. Although the vein is narrow its high gold content warrants its extraction. Notwithstanding having produced 3,233 tons from stopes during 1937, a blocked out reserve, easily accessible for cheap mining, of 5,915 tons, remains.

Production during the coming year should more than equal that of 1937.

Colonia Nos. 1 and 2 Veins

Following the policy outlined last year, no work was done in this section and will be further postponed until such a time as it is practicable to concentrate on this section of the mine.

Southwest Vein

As previously explained, the work of prospecting the Zero and Lower 200 ft. levels will be actively pursued when the Santa Gertrudis Raise connects to the Upper 150 or Peña Blanca level.

Miscellaneous Group

Veta No. 4 South

The small amount of development work carried out produced 645 tons. On the completion of raises from the Uppper 250 to the Upper 350 ft. level it is proposed to commence stoping this vein during the present year.

Unless the deeper reaches of the vein, to be explored this year on the Lower 200 ft. level, show a marked improvement, over that above the Peña Blanca level, it will be a disappointing producer.

Porvenir Vein

400 feet of development was completed on the Upper 450 ft. level which disclosed that ore of commercial value may not be expected at this elevation.

The exploration crosscut east from the Porvenir in search of the downward extension of veins outcropping 700 feet above the Upper 450 ft. level and west of the Culebra vein will be started in the early part of the year.

Production amounted to 342 tons, all from development.

Santa Gertrudis No. 1 Vein

On the Lower 300 ft. level 260 feet was advanced showing good values. Because of insufficient development, no addition

was made to the blocked out reserve reported at the close of the year 1936.

Proposed development to the west on the Lower 200 ft. level will determine the extension downward of the fair grade ore exposed on the Zero level.

Production amounted to 1,165 tons, all from development.

Santa Gertrudis No. 2 Vein

Having found but patches of ore in this relatively strong vein at the Upper 250 ft. level and no ore on the Upper 450, it is proposed to crosscut it from the Jucuara No. 1 on the Peña Blanca level. Results of that work will determine whether or not the vein has any future prospects.

THE MILL

Tonnage Crushed

	1937	1936
Total wet tons received	177,800.31	181,898.49
Average per cent of moisture	8.691	8.302
Total dry tons milled	162,500.	166,800.
Average tons milled per day (365 days)	445.	456.
Average tons milled per day, full running time	493.	496.
Average tons milled per day, per 1,850 lbs. stamps	24.7	24.8
Number of 1,850 lbs. stamps	20.	20.
Total tons treated by mill to Dec. 31, 1937	2,983,708.	2,821,208.

Recovery

	1937	1936
Average ounces silver received per ton	21.9945	20.390
Total ounces silver produced	3,574,116.	3,401,024.
Average ounces silver recovered per ton	19.7560	18.610
Total ounces silver recovered	3,210,337.	3,104,174.
Average silver recovery, per cent	89.8219	91.272
Average ounces gold received per ton	.1457	.1125
Total ounces gold produced	23,675.	18,765.
Average ounces gold recovered per ton	.1336	.1072
Total ounces gold recovered	21,717.	17,878.
Average gold recovery, per cent	91.7288	95.275

Treatment Period Detail

	1937				1936			
	Hrs.	Min.	Ag. %	Au. %	Hrs.	Min.	Ag. %	Au. %
Extraction by Crushing Solution	9	00	40.39	73.55	9	00	38.87	73.78
Extraction by Agitation	84	36	50.99	20.57	90	52	52.47	20.89
Extraction in Slimes Presses	1	05	.17	.29	1	05	.45	1.33
	94	41	91.55	94.41	100	57	91.79	96.00
Less Dissolved Value Loss			1.73	2.68			.52	.73
Recovery			89.82	91.73			91.27	95.27
Per Cent Sand Not Passing 150 mesh			27.40				29.834	

Comparative Statement
On Consumption of Mill Supplies

	1937					1936				
	Amount Consumed	Total Cost U. S. Cy.	Cost Per Unit	Cost Per ton Crushed (Tons) 162,500	Cost Per Fine Oz. Bullion Produced (Ounces) 3,232,054	Amount Consumed	Total Cost U. S. Cy.	Cost Per Unit	Cost Per ton Crushed (Tons) 166,800	Cost Per Fine Oz. Bullion Produced (Ounces) 3,122,052
Cyanide (100% KCN)	610,513 lbs.	$73,970.96	$.1212	$.4552	$.0229	654,062 lbs.	$80,348.07	$.1228	$.4817	$.0257
Sulphur	254,110 "	11,340.16	.0446	.0698	.0035	249,270 "	11,285.69	.0453	.0677	.0036
Zinc Dust	130,067 "	17,765.51	.1366	.1093	.0055	113,496 "	13,590.64	.1197	.0815	.0044
Muriatic Acid	12,880 "	2,450.20	.1902	.0151	.0008	7,935 "	1,338.23	.1686	.0080	.0004
72" Filter Canvas	4,940 yds.	4,970.93	1.0062	.0306	.0015	4,487 yds.	4,456.00	.9931	.0267	.0014
Lime	2,701,364 lbs.	18,399.28	.0068	.1132	.0057	2,566,734 lbs.	18,125.13	.0071	.1087	.0058
Borax Glass	4,500 "	888.71	.1975	.0055	.0003	3,650 "	788.08	.2159	.0047	.0003
Soda	1,008 "	58.47	.0580	.0004	....	212 "	13.43	.0633	.0001	...
Fuel Oil	6,507 gals.	2,057.96	.3163	.0127	.0006	6,638 gals.	2,124.43	.3200	.0127	.0007
Steel Balls	94,622 lbs.	4,940.74	.0522	.0304	.0015	92,324 lbs.	5,034.10	.0545	.0302	.0016
Crusher and Battery Liners, Shoes and Dies	36,755 "	3,416.20	.0929	.0210	.0011	33,635 "	3,098.53	.0921	.0186	.0010
Tube Mill and Ball Mill Liners	91,694 "	12,259.52	.1337	.0754	.0038	108,785 "	14,490.11	.1332	.0869	.0046
		$152,518.64		$.9386	$.0472		$154,692.44		$.9275	$.0495

As mentioned previously, less favorable power conditions precluded equalling the tonnage of 1936 by some 4,000 odd tons.

Subnormal rainfall at the end of 1937 and the beginning of this year make it highly probable that dry season power shortage will in 1938 exceed that of the year 1937. It is hoped that this feature may be considerably offset by curtailing stoping operations and drawing on the excess broken reserves built up during 1937 expressly to take care of such an emergency.

Changes in the mill equipment were started during the year to increase agitation time and fineness of grinding, both of which will economically increase recovery an estimated one percent. It is expected that this will be effected at a very nominal increase in per ton cost.

Although the mill building and much of the equipment is over 25 years old, no abnormal outlay is anticipated for maintenance. A few replacements will be effected for greater efficiency.

POWER

Rainfall	1937	1936
Total rainfall, inches	62.57	70.35
Number of rainy days	180.	206.
Greatest monthly rainfall, inches	14.92 (Sept.)	15.98 (May)
Lowest monthly rainfall, inches	.36 (Feb.)	.37 (Apr.)
Greatest single rainfall, inches	2.92 (Sept.)	2.15 (May)

POWER DISTRIBUTION

	1937		1936	
	Kilowatt Hours	K.W. Hrs. Per Ton	Kilowatt Hours	K.W. Hrs. Per Ton
Ventilation	17,335	.107	17,815	.107
Mine Power	2,199,835	13.537	2,518,110	15.097
Electric Haulage	182,265	1.122	188,350	1.129
Blacksmithing	33,510	.206	44,100	.264
Mine Lights	49,130	.302	35,750	.214
Hoisting	16,460	.101	18,275	.109
Mill Power	5,756,360	35.424	5,482,355	32.868
Mill Lights	57,945	.357	52,170	.313
Surface Lights	493,970	3.040	489,935	2.937
Surface Power	23,325	.143	54,300	.326
Machine Shop	123,965	.763	90,960	.545
Laboratory	15,420	.095	20,130	.121
Totals	8,969,520	55.197	9,012,250	54.030
Power Production by:				
San Juancito Plant		52.15%		50.15%
Guadalupe Plant		42.02%		40.51%
Aguacatal Plant		5.83%		9.34%
		100.00%		100.00%

COST OF POWER PRODUCTION

	1937			1936		
	Amount U. S. Cy.	Per Ton	K.W. Hour	Amount U. S. Cy.	Per Ton	K.W. Hour
Labor	$11,973.47	.07368	.0013349	$13,544.82	.08120	.0015029
Supplies	4,514.51	.02778	.0005033	5,288.75	.03171	.0005868
Totals	$16,487.98	.10146	.0018382	$18,833.57	.11291	.0020897

Based on Horsepower Generated:	1937	1936
Horsepower Hours	12,023,485	12,080,764
Cost per Horsepower Hour	$ 0.001371	$ 0.001559
Cost per Horsepower Year	12.00996	13.694256
Cost per Horsepower Year, Decrease	1.684296	

OTHER DEPARTMENTS

Medical Department

	1937	1936
Cost of Maintenance	$ 8,378.51	$ 8,707.89
Total consultations, examinations and treatments	10,630	10,955

Assay Office and Laboratory

	1937	1936
Total number of assays run	32,700	31,923
Average number of assays per day	90	87
Total Cost	$ 9,331.93	$ 8,863.83
Cost per assay	.29	.28

Schools

	1937	1936
Average Daily Attendance during year:		
Boys' School	160	115
Girls' School	135	105
Rosario Mixed School	36	28
La Reforma Mixed School	31	26
Rosario Foreign School	8	9
Total Expense—Native Schools	$11,251.56	$ 9,461.75
Total Expense—Rosario Foreign School	2,075.80	2,420.64
Total Expenses—Native and Foreign Schools	$13,327.36	$11,882.39
Increase	$ 1,444.97	

The increase in expenditures for native schools was brought about by the addition of teachers and equipment to keep pace with the growing population and increased efficiency of local authorities in enforcing attendance.

Police and Garrison

	1937	1936
Total Maintenance Expense	$15,954.08	$16,240.43
Decrease	$ 286.35	

Hotel

	1937	1936
Total number of meals served	24,133	26,640
Total Cost	$11,334.18	$12,542.00
Cost per meal	.47	.47

Roads

	1937	1936
Total Maintenance	$11,148.05	$ 9,961.39
Increase	1,186.66	

Extensive repairs on the road to Tegucigalpa increased the yearly outlay by $1,186.66. As a result, local freight rates have been reduced $2.00 a ton.

	1937	1936
Total Expense	$ 3,975.01	$ 3,841.85
Increase	133.16	

EXPANSION

Early in the year an option was taken on the Cuyal and San Felix Mine near the town of Langue close to the El Salvador frontier. $6,018.52 was expended on this gold prospect before abandonment late in the year. Limited high grade pockets were found, insufficient to be in the least attractive.

CONCLUSION

Highly deserved and grateful acknowledgment is hereby made of the untiring efforts of the entire staff and of the hearty co-operation of the Officers and Directors to make it possible to report new high records in gold production, earnings and ore reserves.

Respectfully submitted,

K. H. Matheson,
General Manager.

Annex "A"—Active Ore Reserves

ESTIMATED RESERVES (13 and 14 cu. ft. per ton)	Average Width Feet Vein	Waste	Stope	Tons of Ore plus Waste	Av. Troy ounces per ton Ag.	Au.	Total Troy ounces Ag.	Au.
Veins								
Independencia Group								
Independencia	1.89	2.11	4.00	14,651	15.	.06	212,446	923
San Blas ...	.93	2.07	3.00	2,900	18.	.03	52,200	87
San Blas No. 2	1.24	1.76	3.00	8,848	11.	.08	102,387	695
Salvador Group								
Salvador	2.04	1.88	3.92	25,734	23.	.07	598,163	1,675
Jucuara No. 1 —Fortuna ..	2.58	1.66	4.24	200,198	28.	.06	5,670,248	12,257
Fortuna–North	1.87	1.49	3.36	2,630	21.	.04	54,769	105
Fortuna Vein.	2.30	1.47	3.77	4,411	38.	.07	169,649	306
Jucuara Group								
Jucuara No. 2	3.19	2.41	5.60	143,913	28.	.31	4,006,725	44,551
Jucuara No. 3	1.73	2.11	3.84	10,204	12.	.26	118,166	2,625
Jucuara No. 4	2.65	1.53	4.18	27,656	27.	.08	750,071	2,339
Jucuara No. 5	2.34	1.83	4.17	5,890	13.	.08	77,546	484
56 Fault Vein	2.02	2.35	4.37	3,560	19.	.21	68,182	746
Santa Fe Group								
Santa Fe No. 1.	1.80	1.84	3.64	43,153	22.	.13	968,402	5,470
Santa Fe No. 2.	2.79	2.50	5.29	65,231	44.	.44	2,878,364	28,738
Santa Fe No. 3.	2.22	1.78	4.00	18,961	29.	.32	551,115	6,116
San Benito No. 1	1.26	1.96	3.22	6,372	15.	.15	94,735	960
San Benito No. 2	1.75	1.44	3.19	25,318	36.	.40	926,859	10,245
Old Mine Group								
San Joaquin...	1.18	1.82	3.00	5,915	16.	.21	94,450	1,226
Colonia	1.00	2.09	3.09	8,980	15.	.13	130,939	1,169
Colonia No. 2.	1.38	1.62	3.00	1,602	11.	.10	17,541	163
Capitana	.81	2.19	3.00	3,835	4.	.22	14,918	830
Other Veins								
Veta No. 4 South	1.57	1.43	3.00	12,694	23.	.03	293,780	424
Santa Gertrudis	.94	2.06	3.00	6,300	20.	.04	126,000	252
TOTAL				648,956	27.70	.1885	17,977,655	122,386

Broken Ore in Stopes

BROKEN ORE RESERVES (20.5 cu. ft. per ton)

Veins	
Independencia	274
Salvador	8,123
Jucuara No. 1 (Fortuna).....	20,307
Santa Fe Main Vein.....	48
Santa Fe No. 1.....	4,194
Santa Fe No. 2.....	7,369
Santa Fe No. 3.....	2,253
Jucuara No. 3	5,568
San Benito No. 1	1,882
San Benito No. 2	2,709
San Blas No. 2	37
Veta No. 4 North	1,216
Capitana	176
San Joaquin	23
Mine Storage Chutes	1,400
Mill Ore Bin	481
Total	56,060

Summary—Active Reserves

Estimated Ore at 13 and 14 cu. ft. per ton	648,956	27.70	.1885	17,977,655	122,386
Broken Ore in Stopes at 20.5 cu. ft. per ton	56,060	27.00	.1700	1,513,620	9.530
TOTAL ACTIVE RESERVES AS OF JANUARY 1, 1938	705,016	27.64	.1871	19,491,275	131,916

Annex "B"

ESTIMATED RESERVES (13 cu. ft. per ton) *Veins*	Tons of ore plus waste	Av. Troy Ozs. per ton Ag.	Au.	Total Troy Ounces Ag.	Au.
Esperanza (South San Miguel Extension South)	5,450	14.	.04	76,300	218
Porvenir	2,088	13.	.03	27,189	53
Nuevo	8,450	9.	.11	76,050	929
Southwest	10,500	16.	.03	168,000	315
Veta No. 4 North	4,166	11.	.03	45,780	126
Carmen	10,000	16.	.03	160,000	300
TOTAL INACTIVE RESERVES AS OF JAN. 1, 1938	40,654	14.	.05	553,319	1,941

Annex "C"

Veins and Groups *Independencia Group*	Drifts	Cross cuts	Raises	Winzes	Total Feet
Independencia	585	351	342	..	1,278
San Blas No. 2	954	289	370	..	1,613
Salvador Group					
Salvador	695	416	292	..	1,403
Jucuara No. 1 (Fortuna)	2,500	1,318	1,026	..	4,844
Jucuara Group					
Jucuara No. 2	1,681	170	1,977	..	3,828
Jucuara No. 3	73	7	....	..	80
Jucuara No. 4	....	102	124	..	226
No. 56 Fault Vein	....	49	....	..	49
Santa Fe Group					
Santa Fe No. 1	2,510	479	1,213	..	4,202
Santa Fe No. 2	326	192	540	..	1,058
Santa Fe No. 3	29	....	....	..	29
San Benito No. 1	822	499	830	..	2,151
San Benito No. 2	1,329	317	575	..	2,221
Old Mine Group					
Southwest No. 2	301	74	31	..	406
Other Veins					
Santa Gertrudis No. 1	394	....	329	..	723
Veta No. 4 South	226	....	104	..	330
Porvenir	387	85	....	..	472
Carmen	238	....	....	..	238
Aurora Group					
Clephane	541	677	....	..	1,218
Esperanza Crosscuts					
Lower 300 Level	....	106	27	..	133
Lower 400 Level	....	80	259	33	372
Jucuara Crosscuts					
Upper 150 Level	....	265	....	..	265
Other Crosscuts					
Ventilation Crosscut (Jutiapa)	....	649	....	..	649
Upper 150 Aguacatal Crosscut	....	1,328	....	..	1,328
Lower 400 Aguacatal Crosscut	....	649	....	..	649
Lower 200 Carmen Crosscut No. 6	....	222	....	..	222
Lower 300 Jucuara No. Xcut No. 41	....	264	....	..	264
Lower 300 Southwest Crosscut No. 11	....	529	....	..	529
Station Crosscuts					
Lower 300 Level	....	249	....	..	249
Lower 400 Level	....	175	....	..	175
Lower 500 Level	....	174	....	..	174
Lower 650 Level	....	113	....	..	113
Upper 450 Level	....	9	....	..	9
Upper 550 Level	....	98	....	..	98
Shaft Raises					
Shaft Raise No. 3	....	....	389	..	389
Shaft Raise No. 5	....	....	150	..	150
TOTALS	13,591	9,935	8,578	33	32,137

ORE PRODUCTION

Annex "D"

From Stoping Operations:

Veins	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Independencia Group													
Independencia	204	281	117	173	277	247	324	398	628	558	1,150	1,070	5,427
San Blas No. 2	96	....	....	....	....	....	....	....	....	43	343	151	633
Salvador Group													
Salvador	2,466	1,420	1,602	1,075	1,134	434	1,789	2,249	2,190	2,498	1,306	899	19,062
Jucuara No. 1 (Fortuna)	2,821	2,961	2,773	1,612	1,679	2,473	2,458	1,646	1,300	1,299	1,385	3,203	25,610
Jucuara Group													
Jucuara No. 2	162	595	763	854	1,155	972	1,273	1,237	1,186	1,175	1,663	1,187	12,222
Jucuara No. 3	1,250	632	547	308	382	303	1,123	779	1,046	603	499	360	7,832
Jucuara No. 4	852	849	1,094	1,053	765	558	428	722	892	424	352	257	8,246
Jucuara No. 5	158	....	....	....	....	....	253	317	210	....	4	....	942
56 Fault Vein	136	531	549	552	368	293	251	268	378	741	432	188	4,687
Santa Fe Group													
Santa Fe Main Vein...	....	....	....	....	....	....	....	236	269	282	262	261	1,310
Santa Fe No. 1	....	....	....	122	242	215	272	168	244	332	619	273	2,487
Santa Fe No. 2	1,014	1,217	609	665	1,210	717	804	1,391	828	918	784	1,912	12,069
Santa Fe No. 3	931	212	588	422	1,223	795	1,297	704	735	930	807	432	9,076
San Benito No. 1	818	1,129	525	457	497	294	488	239	650	749	764	348	6,958
San Benito No. 2	79	210	177	130	213	125	131	71	177	93	357	7	1,770
Old Mine Group													
San Joaquin	211	296	389	238	481	117	541	116	93	153	340	258	3,233
Capitana	....	....	123	26	....	....	....	....	....	....	....	....	149
Miscellaneous Group													
Veta No. 4 North	....	....	....	....	....	....	32	272	171	265	173	43	956
STOPING TOTALS..	11,198	10,333	9,856	7,687	9,626	7,543	11,464	10,813	10,997	11,063	11,240	10,849	122,669

From Development Operations

Veins	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Independencia Group													
Independencia	....	66	172	178	46	206	450	431	165	178	72	148	2,112
San Blas No. 2	....	48	55	121	170	375	481	312	209	308	151	45	2,275
Salvador Group													
Salvador	72	182	37	....	....	131	289	260	47	113	223	185	1,539
Jucuara No. 1 (Fortuna)	715	808	720	215	182	418	507	490	196	499	344	666	5,760
Jucuara Group													
Jucuara No. 2	1,018	1,100	1,130	778	1,187	1,375	809	1,062	702	392	561	534	10,648
Jucuara No. 3	22	....	87	38	11	....	....	....	....	....	....	....	158
Jucuara No. 4	....	....	....	....	....	....	....	25	57	115	126	....	323
Santa Fe Group													
Santa Fe No. 1	377	193	367	300	407	726	807	844	776	524	792	381	6,494
Santa Fe No. 2	368	61	95	111	107	137	6	22	18	120	159	233	1,437
Santa Fe No. 3	....	....	....	....	....	15	....	....	....	19	45	6	85
San Benito No. 1	232	106	107	27	105	212	121	185	306	610	281	174	2,466
San Benito No. 2	215	253	271	169	239	243	201	208	518	524	252	54	3,147
Old Mine Group													
Southwest No. 2	130	40	....	....	....	....	....	....	....	60	96	71	397
Miscellaneous Group													
Veta No. 4 South	357	125	127	....	....	....	....	....	....	....	....	36	645
Veta No. 4 North	....	....	....	....	....	....	....	....	....	....	....	54	54
Santa Gertrudis No. 1.	3	20	62	28	4	98	11	64	346	319	105	105	1,165
Carmen	....	....	....	....	....	....	....	....	....	....	244	388	632
Porvenir	....	....	....	....	....	....	5	145	81	31	63	17	342
DEVELOPMENT TOTALS	3,509	3,002	3,230	1,965	2,458	3,936	3,687	4,048	3,421	3,812	3,514	3,097	39,679
STOPING TOTALS	11,198	10,333	9,856	7,687	9,626	7,543	11,464	10,813	10,997	11,063	11,240	10,849	122,669
GRAND TOTALS ...	14,707	13,335	13,086	9,652	12,084	11,479	15,151	14,861	14,418	14,875	14,754	13,946	162,348

Annex "E"
TONNAGE MINED
From October 1, 1907, to January 1, 1938

Veins	Total including Stoping, Devel. & Filling Oct. 1, 1907 to Dec. 31, 1936	Total including Stoping Devel. and Filling for Year 1937	Grand total including Stoping, Devel. and Filling January 1, 1938
Buena Ventura	98,490	.....	98,490
Candelaria Group	166,573	.....	166,573
Capitana	60,422	149	60,571
Carmen No. 1	18,365	632	18,997
Carmen No. 2	1,105	.....	1,105
Catalina	6,587	.....	6,587
Colonia No. 1	61,552	.....	61,552
Colonia No. 2	665	.....	665
Concepcion	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	106,245	.....	106,245
Esperanza	8,710	.....	8,710
Fortuna Group	94,246	827	95,073
Guadalupe	61,177	.....	61,177
Independencia	273,042	7,539	280,581
Jucuara No. 1 (Fortuna)	107,634	30,543	138,177
Jucuara No. 2	50,994	22,870	73,864
Jucuara No. 3	25,161	7,990	33,151
Jucuara No. 4	6,774	8,569	15,343
Jucuara No. 5	495	942	1,437
56 Fault	.....	4,687	4,687
North	4,647	.....	4,647
Northwest	89,378	.....	89,378
Nueva	28,147	.....	28,147
Porvenir	2,558	342	2,900
Rosario	150,915	.....	150,915
Salvador	564,530	20,601	585,131
San Benito No. 1	95,615	9,424	105,039
San Benito No. 2	2,916	4,917	7,833
San Blas No. 1	6,123	.....	6,123
San Blas No. 2	1,403	2,908	4,311
San Joaquin	65,610	3,233	68,843
San Luis	2,389	.....	2,389
San Miguel North	174,801	.....	174,801
San Miguel Group	125,855	.....	125,855
Santa Fe Main Vein	185,138	1,310	186,448
Santa Fe No. 1	3,095	8,981	12,076
Santa Fe No. 2	33,010	13,506	46,516
Santa Fe No. 3	20,266	9,161	29,427
Santa Gertrudis No. 1	30,944	1,165	32,109
Santa Gertrudis No. 2	1,739	.....	1,739
Socorro	22,592	.....	22,592
Southwest No. 1	21,769	.....	21,769
Southwest No. 2	.....	397	397
Termopilas	1,094	.....	1,094
West	97,005	.....	97,005
Veta No. 4 North	8,323	1,010	9,333
Veta No. 4 South	3,867	645	4,512
Ore from Development	63,599	.....	63,599
Miscellaneous	5,380	.....	5,380
TOTALS	2,987,525	162,348	3,149,873

Summary to Annex "E"
From October 1, 1907, to January 1, 1938

From Stoping	2,422,099
From Development	492,373
From Fills	235,401
TOTAL	3,149,873

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NEW YORK and HONDURAS ROSARIO MINING COMPANY



FIFTY-EIGHTH ANNUAL REPORT

NINETEEN HUNDRED AND THIRTY-EIGHT

1938

REPORT of the
NEW YORK and HONDURAS
ROSARIO MINING COMPANY

NEW YORK

JANUARY 1, 1939

OFFICERS

WM. A. PRENDERGAST, *President*

H. A. GUESS, *Vice-President*

W. C. LANGLEY, *Treasurer*

J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

LEWIS L. CLARKE, *Chairman*

H. A. GUESS

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EXECUTIVE COMMITTEE

LEWIS L. CLARKE, *Chairman*

H. A. GUESS

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WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

PRESIDENT'S REPORT

February 17, 1939.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company:

This is the Fifty-eighth Annual Report of the Company and covers the year 1938.

Your attention is respectfully directed to the Report of our General Manager, Mr. K. H. Matheson (Pages 17 to 38) for detailed information regarding the operations of your property during the past year, the present status of its ore reserves, and the work it is anticipated will be done during 1939.

It is with much pleasure that I am enabled to state that our relations with the government and people of Honduras have continued to be of a cordial and helpful character, and in your name I extend to them this expression of our grateful appreciation of their friendly attitude towards this Company extending over a period of 58 years, and our earnest hopes for their continued happiness and steady advancement in the great family of the Nations.

Since the first of the year many inquiries have been received from Stockholders regarding the prices at which we will be able to sell our product, which is *foreign silver*. During the years 1936 and 1937, we obtained an average price of $.45226 per ounce, and last year $.43441, a reduction of $.01785. From January 1st to March 28th, 1938, the price continued to be $.45 per ounce, but on the latter date it was reduced to $.44, and on the following day, to $.43. We have continued to receive $.43 per ounce on all sales since that time. What the price may be in the immediate future cannot be foretold. Our Government is the only potential buyer of silver in the world today. It is governed by the Silver Purchase Act of June 19th, 1934, which provides that:

> "SEC. 3. Whenever and so long as the proportion of silver in the stocks of gold and silver of the United States is less than one-fourth of the monetary value of such stocks, the Secretary of the Treasury is authorized and directed to purchase silver, at home or abroad, for present or future delivery with any direct obligations, coin, or currency of the United States, authorized by law, or with any funds in the Treasury not otherwise appropriated, at such rates, at such times, and upon such terms and conditions as he may deem reasonable and most advantageous to the public interest: Provided, That no purchase of silver shall be made hereunder at a price in excess of the monetary value thereof".

As long as this provision of law is operative, our Government will continue to be a buyer, but the price it will pay is within its discretion. You will, therefore, appreciate that the price of silver may be affected by new legislation, or by a revision of the price policy of the Treasury Department.

For your ready reference, may I submit the following important statistics taken from the accounting tables that are a part of this Report:

Silver production during 1938 was:

3,337,965$^{43}/_{100}$ ounces, compared with
3,211,296$^{09}/_{100}$ ounces, in 1937, an increase of
126,669$^{34}/_{100}$ ounces.

Gold production for 1938 was:
19,832$^{886}/_{1000}$ ounces, compared with
21,552$^{884}/_{1000}$ ounces, in 1937, a decrease of
1,719$^{998}/_{1000}$ ounces.

The average cost per ounce for producing silver in 1938 was $.17439, compared with $.16114 in 1937, an increase of $.01325.

The average price obtained in 1938 for silver was $.43441 compared with $.45115 in 1937, a decrease of $.01674.

The average price obtained for our gold production in 1938 was $35.00 per ounce, the same as we obtained in the year 1937.

Our Operating Expenses in 1938 were $1,098,372.85 compared with $1,104,304.73, a decrease of $5,931.88.

The New York Administration and General Expenses in 1938 were $86,781.81, compared with $78,026.48, an increase of $8,755.33.

The Net Profit for 1938 carried to Surplus was $796,155.72 compared with $887,003.72 in 1937, a decrease of $90,848.00.

This decrease in Net Profits is due in large part to reduced gold production amounting to $60,199.92 less an increase in the value of silver production of $1,289.65, resulting in a net decrease in revenue from bullion sold in 1938 of $58,910.27 (see comparative statement of operations, page 8). However, there are other items entering into this decrease in Net Profits and they are explained in detail below.

REVENUE ACCOUNTS

Decrease in Gold Production	(page 8)	$60,199.92	
Decrease in Income from Investments, etc.	(page 9)	3,993.38	
		$64,193.30	
Less increase in value of Silver Production	(page 8)	1,289.65	$62,903.65

EXPENSE ACCOUNTS (page 9)

Decrease in Operating Expenses		$ 5,931.88	
Decrease in Federal Income Tax		7,210.40	
Decrease in Amortization of Premium on U. S. Government Bonds		76.18	$13,218.46
Increase in Cost of Freight and Expense on Bullion		$ 1,631.52	
Increase in New York Administration and General Expenses		8,755.33	
Increase in Investigation of Outside Properties		24,213.97	
Increase in Depletion Account		261.32	
Increase in Federal Capital Stock Tax and New York State Franchise Tax		3,540.12	
Increase due to Obsolete Inventory written off		1,899.24	
Increase in Business Association dues, subscriptions and donations		200.00	
Increase in Sundry Expenses		661.31	41,162.81
Increases less Decreases in Expense Accounts			27,944.35
Decrease in Net Profits	(page 9)		$90,848.00

We have paid in dividends from earnings for the year 1938, $734,631.30 or $3.90 a share, compared with $833,525.09, for 1937, or $4.425 a share, a decrease of $.525 a share.

The earnings per share in 1938 were $4.2266 compared with $4.7089 in 1937, a decrease of $.4823 a share.

Our Income from Investments and sundry items in 1938 was $73,344.31 compared with $77,337.69 in 1937, a decrease of $3,993.38. This decrease is accounted for by the following facts: (1) A reduction in the amount of securities owned and, (2) lower earning rates of interest.

Our Gross Income (Operations and Investments, etc.), was $941,293.58, of which Operations contributed $92^{208}/_{1000}\%$, and Investments, etc., $7^{792}/_{1000}\%$.

The Surplus on December 31, 1938, was...	$2,306,527.85
and on December 31, 1937.....	2,133,774.10
an increase of	$ 172,753.75

which is accounted for in part by an increase in the market value of securities during 1938 of $114,019.61.

On December 31, 1937, there was an adverse difference between the cost and market values of the securities owned of $21^{18}/_{100}\%$. On December 31, 1938, the adverse difference was $15^{74}/_{100}\%$, a gain of $5^{44}/_{100}\%$.

Neptune Gold Mining Company

In the last Annual Report you were advised of the incorporation of the above named Company, which acquired certain properties in Nicaragua, held under option by this Company and Associates. Complete information was given in that report of the respective stock holdings of those interested, the official personnel, and the securities issued up to February 12, 1938. This Company's advances for capital account were then $421,752.36 for which it had received ten-year five per cent. (5%) debentures, and 5,100 shares of common capital stock out of a total issue of 20,000 shares.

Since February 12, 1938, we have advanced for capital account an additional amount of $167,223.68 for which we have received debentures as described above. Preparatory to the operation of the property, a working capital fund of $300,000.00 was established to which the participants in the original option were to be called upon to subscribe in accordance with their interests in the option, which would make our share thirty per cent. (30%). Up to this time we have advanced fifteen per cent. (15%) or $45,000.00. As you will find set forth in the Balance Sheet (page 10), our entire interest in the Neptune Gold Mining Company is now $633,976.04.

The property was made ready for operation somewhat earlier than had been anticipated, and milling commenced on October 14, 1938. Operations have continued without interruption and by December the mill was treating slightly over 300 tons per day.

Shipments of bullion have been made every two weeks since November 10th.

The Annual Report of the Neptune Gold Mining Company will be made in due course, and we will advise you promptly of its essential facts and comments.

There is submitted with this report and made a part hereof:

1. A Comparative Statement of Operations for the years 1938 and 1937;
2. A Comparative Income and Profit and Loss Statement for the years ended December 31, 1938, and December 31, 1937;
3. A Balance Sheet for the year ended December 31, 1938;
4. A Statement of the Surplus Account for the year ended December 31, 1938;
5. A List of the Securities held by this Company December 31, 1938;
6. A Table showing Bullion Production and Dividend Distribution to Stockholders from the organization of the Company, including all the dividends paid from the earnings of the year 1938.

Respectfully submitted,

WM. A. PRENDERGAST,

President.

Comparative Statement of Operations

For the Years 1938 and 1937

	Year 1938	Year 1937	Increase Decrease*
Total sales value of Gold and Silver recovered	$2,144,214.86	$2,203,125.13	$ 58,910.27 *
Tons of ore milled	154,500	162.500	8,000 *
Ounces of Silver recovered	3,337,965.43	3,211,296.09	126.669.34
Number of ounces of Silver recovered per ton of ore	21.60495	19.76182	1.84313
Sales value of Silver recovered	$1,450,063.85	$1,448,774.20	$ 1,289.65
Average sales value of Silver per ounce	$ .43441	$ .45115	$ .01674*
Average cost of Silver per ounce**	$ .17439	$ .16114	$ .01325
Average profit on Silver per ounce**	$ .26002	$ .29001	$ .02999*
Value of Silver recovered per ton of ore	$ 9.3855	$ 8.9155	$ .470
Average cost of Silver per ton of ore**	$ 3.7677	$ 3.1843	$ .5834
Average profit on Silver recovered per ton of ore**	$ 5.6178	$ 5.7312	$ .1134 *
Ounces of Gold recovered	19,832.886	21,552.884	1,719,998 *
Number of ounces of Gold recovered per ton of ore.	.12837	.13263	.00426*
Total sales value of Gold recovered	$ 694,151.01	$ 754,350.93	$ 60,199.92 *
Average sales value of Gold per ounce	$ 35.00	$ 35.00	.....
Value of Gold recovered per ton of ore	$ 4.4929	$ 4.6422	$ .1493 *
Number of bars of Bullion shipped from mine	1,973	1,902	71.

**After giving credit for sales value of gold recovered.

Income and Profit and Loss Statement

For the Years Ended Dec. 31, 1938, and Dec. 31, 1937

	Year 1938	Year 1937	Increase Decrease*
Production of Gold and Silver	$2,144,214.86	$2,203,125.13	$ 58,910.27*
Less freight and expenses on bullion	91,110.93	89,479.41	1,631.52
OPERATING INCOME	$2,053,103.93	$2,113,645.72	$ 60,541.79*
Operating expenses	1,098,372.85	1,104,304.73	5,931.88*
MINE OPERATING PROFIT	$ 954,731.08	$1,009,340.99	$ 54,609.91*
New York administrative and general expenses	86,781.81	78,026.48	8,755.33
NET OPERATING PROFIT	$ 867,949.27	$ 931,314.51	$ 63,365.24*
Add income from investments, etc.	73,344.31	77,337.69	3,993.38*
	$ 941,293.58	$1,008,652.20	$ 67,358.62*
Less other deductions from income (Note A)	46,248.90	15,810.44	30,438.46
PROFIT BEFORE TAXES ON INCOME AND PROVISION FOR DEPLETION	$ 895,044.68	$ 992,841.76	$ 97,797.08*
Federal taxes on income (the year 1937 includes excess-profits tax amounting to $11,347.23)	96,098.68	103,309.08	7,210.40*
	$ 798,946.00	$ 889,532.68	$ 90,586.68*
Appropriated for depletion from earnings (Note B)	2,790.28	2,528.96	261.32
NET PROFIT	$ 796,155.72	$ 887,003.72	$ 90,848.00*

NOTE A: Other deductions from income include:			
Investigations of outside properties	$ 28,358.46	$ 4,144.49	$ 24,213.97
Federal capital stock tax and New York State franchise tax	11,095.33	7,555.21	3,540.12
Amortization of premium paid on United States Government securities	1,412.49	1,488.67	76.18*
Obsolete inventory written off	1,899.24	.....	1,899.24
Business association dues, subscriptions and donations	1,010.00	810.00	200.00
Sundry	2,473.38	1,812.07	661.31
	$ 46,248.90	$ 15,810.44	$ 30,438.46

NOTE B: Beginning with the year 1932, depletion has been taken in tax returns on a percentage basis in accordance with respective Revenue Acts. Entries recording depletion as they affect the older portion of the property are carried in the general accounts. Depletion deductions on ore mined from the newer discoveries, which newer discoveries are not carried on books, are made for income tax purposes only.

BALANCE

DECEMBER

ASSETS

Mines, Plant and Equipment			
Mines, real estate and concessions	$3,000,000.00		
Less allowance for depletion of Mines	2,190,351.63	$ 809,648.37	
Buildings, machinery and equipment	$2,099,991.15		
Less allowance for depreciation	1,657,334.25	442,656.90	$1,252,305.27
Current Assets			
Cash		$ 192,121.94	
Bullion at smelters and in transit—less allowance for expenses		322,850.45	
U. S. Government bonds and other marketable securities—(at cost, less amortization of premium paid on government securities)	$1,515,347.27		
Less reserve to reduce to quoted market values	238,502.41		
	$1,276,844.86		
Interest accrued on bonds	7,960.51	1,284,805.37	
Broken ore in stopes and mill bins—(at cost)		248,294.13	
Inventories—materials and supplies—(at cost)		297,164.88	2,345,236.77
Investments and Other Assets			
Neptune Gold Mining Company:			
Ten-year 5% income debenture notes, due March 1, 1948, face value $588,976.04, and 5,100 shares of its capital stock of no par value—(at cost)	$ 588,976.04		
Advances to its working capital account	45,000.00	$ 633,976.04	
New York World's Fair 1939 Incorporated, 4% debentures, due January 1, 1941—(at cost)		5,000.00	
Sundry accounts receivable		3,493.23	642,469.27
Deferred Charges			
Inventories of supplies, prepaid insurance, taxes, etc.			143,699.47
			$4,383,710.78

SHEET

31, 1938

LIABILITIES

Current Liabilities

Drafts payable	$ 39,559.05	
Accounts payable	51,173.20	
Accrued taxes	6,682.00	
Provision for federal taxes on income—estimated	96,098.68	$ 193,512.93

Capital Stock and Surplus

Capital stock (par value $10.00 per share):

Authorized and issued—		
200,000 shares	$2,000,000.00	
Less in treasury—		
11,633 shares	116,330.00	
Outstanding ....188,367 shares		$1,883,670.00

Surplus

Earned		$1,750,420.79		
Appreciation of mines	$1,500,000.00			
Less depletion earned	943,892.94	556,107.06	2,306,527.85	4,190,197.85
				$4,383,710.78

Surplus

For the Year Ended December 31, 1938

EARNED SURPLUS

Balance at January 1, 1938		$1,574,876.76

ADDITIONS

Net profit for the year	$796,155.72	
Restoring to earned surplus portion of reserve previously provided to adjust book value of marketable securities to market value, not required at December 31, 1938, because of increase in quoted value of securities by this amount during year	114,019.61	910,175.33
		$2,485,052.09

DEDUCTIONS

Dividends paid, totaling $3.90 per share:		
March, 1938—$ .75 per share	$141,275.25	
June, 1938—$ .75 per share	141,275.25	
September, 1938—$ .90 per share	169,530.30	
December, 1938—$1.50 per share	282,550.50	734,631.30
Balance at December 31, 1938		$1,750,420.79

SURPLUS FROM APPRECIATION OF MINES

Balance at January 1, 1938	$ 558,897.34
Less: allowance for depletion on appreciation of mine valuation	2,790.28
Balance at December 31, 1938	$ 556,107.06
Total surplus at December 31, 1938	$2,306,527.85

Marketable Securities

December 31, 1938

	Par Value	Market Value	
United States Government Securities			
Treasury bonds:			
3¼% due April 15, 1946-1944.....	$ 50,000.00	$ 54,968.75	
3⅜% due June 15, 1947-1943.....	50,000.00	55,015.63	
2¾% due September 15, 1947-1945..	100,000.00	107,031.25	
3% due June 15, 1948-1946.....	50,000.00	54,343.75	
2¾% due March 15, 1951-1948.....	50,000.00	52,859.38	
2½% due December 15, 1953-1949..	50,000.00	51,390.63	
2¾% due September 15, 1959-1956..	50,000.00	51,718.75	
Treasury notes, 1¾% Series "A" due March 15, 1942	42,500.00	44,213.28	
Federal Farm Mortgage Corporation bonds, 3% due May 15, 1949-1944...	75,000.00	80,132.81	
Federal National Mortgage Association, Series "A" 2% Notes due May 16, 1943-1939	50,000.00	50,828.13	$602,502.36
New York State Bonds			
2¾% Emergency Unemployment Relief due July 1, 1939.....	10,000.00	$ 10,100.00	
2¾% Emergency Unemployment Relief due July 1, 1940.....	10,000.00	10,300.00	
3% General State Improvements due July 1, 1941	10,000.00	10,500.00	30,900.00
Domestic Railroad Bonds			
Chicago and Northwestern Railway Co., 1st and Ref. Mtge. 4½% Series "C" due May 1, 2037.....	25,000.00	$ 2,687.50	
Chicago, Rock Island and Pacific Railway Co., 1st and Ref. Mtge. 4% due April 1, 1934	50,000.00	4,125.00	
New Orleans, Texas and Mexico Railway Co., 1st Series "A" 5½% due April 1, 1954	25,000.00	9,812.50	
New York, Chicago and St. Louis R.R. Co., Ref. Mtge. Series "C" 4½% due September 1, 1978.....	50,000.00	26,750.00	
St. Louis and San Francisco Railway Co., Prior Lien Mtge. Bonds, Series "B" 5% due July 1, 1950.....	50,000.00	7,000.00	50,375.00
Domestic Public Utility Bonds			
Birmingham Gas Co., Gold Notes 6% due October 1, 1938.....	50,000.00	$ 40,000.00	
Brooklyn Manhattan Transit Corp., Rapid Transit Collateral Trust Bonds 4½% due May 1, 1966.....	50,000.00	37,125.00	

Domestic Public Utility Bonds (Continued)

	Par Value	Market Value	
Electric Power and Light Corp., 5% Gold Debentures due Feb. 1, 2030	$ 50,000.00	$ 37,125.00	
Joplin Water Works Co., 1st Mtge. 5% Gold Bonds, Series "A" due March 1, 1957	25,000.00	26,375.00	
Mississippi Power and Light Co., 1st Mtge. 5% Gold Bonds due December 1, 1957	50,000.00	44,125.00	
National Power and Light Co., 5% Gold Debentures, Series "B" due May 1, 2030	50,000.00	46,437.50	
Northern States Power Co., 1st and Ref. Mtge. 3½% due February 1, 1967	50,000.00	53,625.00	$284,812.50

Stocks	Number of Shares		
Public Utility Preferred			
Arkansas Power and Light Co., $6.00 cumulative preferred stock, no par	500	$ 37,250.00	
Commonwealth and Southern Corp., $6.00 cumulative preferred stock, no par	550	25,162.50	
Florida Power and Light Co., $7.00 cumulative preferred stock, no par	500	33,000.00	
Jersey Central Power and Light Co., 5½% cumulative preferred stock, par value $100.00 per share	500	34,125.00	
Public Service Co. of Indiana, $7.00 cumulative prior preferred stock, no par	500	24,250.00	153,787.50
Common Stocks, Etc.			
American Chicle Co., common stock, no par	1,000	$122,000.00	
Home Insurance Co., capital stock, par value $5.00 per share	621	18,630.00	
Iowa Southern Utilities Company of Delaware, common stock, par value $15.00 per share	2,100	4,987.50	
Dividend arrears certificate on 500 shares of 7% cumulative preferred stock		8,000.00	
Sundry		850.00	154,467.50
Total market value at December 31, 1938			$1,276,844.86

Other Investments (at cost)

Neptune Gold Mining Company, ten year 5% income debenture notes, due March 1, 1948, face value $588,976.04, and 5,100 shares of its capital stock of no par value	$ 588,976.04
New York World's Fair 1939 Incorporated 4% debentures, due January 1, 1941	5,000.00
	$ 593,976.04

Report of Auditors

New York and Honduras Rosario Mining Company:

We have made an examination of the balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY as at December 31, 1938, and of the statements of income and surplus for the year ended at that date. In connection therewith, we examined or tested accounting records of the Company and other supporting evidence at the New York office, including the minutes of stockholders and directors meetings; we examined reports received from the mine office in Honduras, and also made a general review of the accounting methods and an audit of the operating and income accounts at the New York office for the year.

Cash, securities, and bullion were verified by actual count, inspection of documents and by direct communication with custodian or depositories. Provision for depletion and depreciation charged to income, as in the past, represents the maximum amount allowable under federal revenue acts applicable to properties carried on the books.

In our opinion, based upon our examination, the accompanying balance sheet and related statements of income and surplus show the financial position of the Company at December 31, 1938, and the results of its operations for the year ended at that date. Further, it is our opinion that the statements have been prepared in accordance with accepted principles of accounting and on a basis consistent with the preceding year.

ERNST & ERNST.

New York, N. Y.
February 17, 1939.

Table Showing

Bullion Production — Distribution to Stockholders

1882	$2,452.27	1887	No. 1	$ 37,500— 2½%	($ .25 per share) Dividend
1883	12,900.42	1888	Nos. 2 to 8	112,500— 7½%	(.75 per share) Dividend
1884	149,741.39	1889	Nos. 9 to 14	97,500— 6½%	(.65 per share) Dividend
1885	244,444.70				
1886	224,157.58	1891	Nos. 15 to 17	45,000— 3%	(.30 per share) Dividend
1887	613,446.05	1892	Nos. 18 to 22	187,500—12½%	(1.25 per share) Dividend
1888	767,632.15	1893	Nos. 23 to 26	150,000—10%	(1.00 per share) Dividend
1889	590,189.55				
1890	113.28	1896	Nos. 27 to 30	60,000— 4%	(.40 per share) Dividend
1891	369,587.19	1897	Nos. 31 to 42	180,000—12%	(1.20 per share) Dividend
1892	614,498.67	1898	Nos. 43 to 50	120,000— 8%	(.80 per share) Dividend
1893	492,534.87	1899	Nos. 51 to 63	195,000—13%	(1.30 per share) Dividend
1894	392,485.92	1900	Nos. 64 to 78	255,000—17%	(1.70 per share) Dividend
1895	158,164.42	1901	Nos. 79 to 95	255,000—17%	(1.70 per share) Dividend
1896	449,525.88	1902	Nos. 96 to 100	75,000— 5%	(.50 per share) Dividend
1897	568,872.06	1903	No. 101	15,000— 1%	(.10 per share) Dividend
1898	611,467.76	1904	Nos. 102 to 110	135,000— 9%	(.90 per share) Dividend
1899	798,994.77	1905	Nos. 111 to 124	195,000—13%	(1.30 per share) Dividend
1900	827,443.12	1906	Nos. 125 to 142	285,000—19%	(1.90 per share) Dividend
1901	780,760.18	1907	Nos. 143 to 155	195,000—13%	(1.30 per share) Dividend
1902	490,273.34	1908	Nos. 156 to 167	180,000—12%	(1.20 per share) Dividend
1903	436,818.29	1909	Nos. 168 to 175	120,000— 8%	(.80 per share) Dividend
1904	721,374.87	1910	Nos. 176 to 181	120,000— 8%	(.80 per share) Dividend
1905	993,065.39	1911	No. 182	45,000— 3%	(.30 per share) Dividend
1906	1,112,171.69	1912	Nos. 183 to 184	70,000— 3½%	(.35 per share) Dividend
1907	791,347.62				
1908	788,910.23	1913	Nos. 185 to 189	220,000—11%	(1.10 per share) Dividend
1909—10 months	636,500.00	1914	Nos. 190 to 194	260,000—13%	(1.30 per share) Dividend
1910	890,700.00	1915	Nos. 195 to 199	280,000—14%	(1.40 per share) Dividend
1911	887,169.59	1916	Nos. 200 to 207	400,000—20%	(2.00 per share) Dividend
1912	944,212.67				
1912-13—12 months	1,051,273.28	1917	Nos. 208 to 212	260,000—13%	(1.30 per share) Dividend
1913—last 3 months	328,100.05	1917	Nos. 1 and 2	140,000— 7%	(.70 per share) Amortization
1914	1,239,877.13	1918	Nos. 213 to 216	200,000—10%	(1.00 per share) Dividend
1915	1,191,760.70	1918	Nos. 3 to 6	200,000—10%	(1.00 per share) Amortization
1916	1,553,114.86	1919	Nos. 217 to 220	200,000—10%	(1.00 per share) Dividend
1917	1,674,193.80	1919	Nos. 7 to 10	200,000—10%	(1.00 per share) Amortization
1918	1,803,751.79	1920	Nos. 221 to 226	320,000—16%	(1.60 per share) Dividend
1919	2,115,158.25	1920	No. 11	40,000— 2%	(.20 per share) Amortization
1920	1,568,612.32				
1921	466,956.02	1922	Nos. 227 to 230	200,000—10%	(1.00 per share) Dividend
1922	1,066,732.57	1923	Nos. 231 to 235	250,000—12½%	(1.25 per share) Dividend
1923	1,421,911.15	1924	Nos. 236 to 241	350,000—17½%	(1.75 per share) Dividend
1924	1,584,610.32	1925	Nos. 242 to 249	400,000—20%	(2.00 per share) Dividend
1925	1,763,023.16	1926	Nos. 250 to 257	400,000—20%	(2.00 per share) Dividend
1926	1,601,429.35				
1927	1,341,300.06	1927	Nos. 258 to 265	400,000—20%	(2.00 per share) Dividend
1928	1,500,233.98	1928	Nos. 266 to 274	450,000—22½%	(2.25 per share) Dividend
1929	1,477,710.79	1929	Nos. 275 to 283	500,000—25%	(2.50 per share) Dividend
1930	1,315,821.38	1930	Nos. 284 to 290	371,677—18¾%	(1.87½ per share) Dividend
1931	1,403,104.20	1931	Nos. 291 to 297	364,159—18¾%	(1.87½ per share) Dividend
1932	1,355,117.43	1932	Nos. 298 to 303	283,874—15%	(1.50 per share) Dividend
1933	1,910,740.17	1933	Nos. 304 to 312	659,324—35%	(3.50 per share) Dividend
1934	1,965,520.68	1934	Nos. 313 to 321	753,468—40%	(4.00 per share) Dividend
1935	2,109,313.47	1935	Nos. 322 to 330	800,559—42½%	(4.25 per share) Dividend
1936	2,037,208.11	1936	Nos. 331 to 337	734,632—39%	(3.90 per share) Dividend
1937	2,203,125.13	1937	Nos. 338 to 341	833,525—44¼%	(4.425 per share) Dividend
1938	2,144,214.86	1938	Nos. 342 to 345	734,631—39%	($3.90 per share) Dividend
	$58,555,870.93			$14,335,850	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 284, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distributions, Nos. 1 to 11, inclusive, were paid on Capital Stock of..... 2,000,000.00
Dividends 285 to 345, inclusive, were paid on outstanding capital stock.

GENERAL MANAGER'S REPORT

January 1, 1939.

To the Officers and Directors of the
New York & Honduras Rosario Mining Company,
120 Broadway,
New York, N. Y.

Gentlemen:

In submitting the following report for the year 1938, the usual form is being followed showing comparisons with the previous year. The detail of mine work presents a condensed record useful for reference in connection with future operations.

Production

	1938	1937
Dry Tons Treated	154,500	162,500
Average per ton—Troy ounces silver milled	23.9905	21.9945
Average per ton—Troy ounces gold milled	.1401	.1457
Total Troy ounces silver milled	3,706,540	3,574,116
Total Troy ounces gold milled	21,648	23,675
Total Troy ounces silver recovered	3,335,067	3,210,337
Total Troy ounces gold recovered	19,916	21,717
Average per ton—Troy ounces silver recovered	21.5862	19.7560
Average per ton—Troy ounces gold recovered	.1289	.1336
Ratio of Gold to Silver recovered	1:167	1:148
Bars of Doré Bullion	1,973	1,902
Bullion Fineness of Silver	951.16	959.61
Bullion Fineness of Gold	5.680	6.492
Custom Ore & Au. Bullion—not included above		
Troy Ounces Silver	2.57	....
Troy Ounces Gold	22.955	40.195

Above production figures are based on local assays and not on smelter's returns.

The power shortage during the first half of 1938 was even greater than in 1937. This factor had a marked adverse effect on tonnage milled, resulting in 154,500 tons as against 162,500 the previous year. To offset that condition mill heads were increased to 23.99 ounces silver compared with 21.99 during 1937.

Continual spring power shortage, coupled with the many advantages to be gained from being able to operate normally throughout the year, prompted consideration of the installation of additional power units. Development of the required additional hydroelectric power is economically unfeasible. It was, therefore, decided to install two Diesel electric units of approximately 400 H.P. each. They are now being erected and will be in service during the coming dry season. It is expected the additional power will permit of milling between 170,000 and 175,000 tons annually.

With more normal operations under the added power facilities nearing completion, marked improvement is expected in recovery and labor costs per ton.

Honduras Operating Costs in U. S. Currency

	YEAR—1938		Total Costs	YEAR—1937		Total Costs	Cost Per Ton 1938	Cost Per Ton 1937	Cost Per Ounce of Silver 1938	Cost Per Ounce of Silver 1937
MINING										
Labor		$341,077.21			$350,310.15					
Supplies		235,809.22			284,956.70					
Power		4,496.68			4,525.98					
Depreciation		8,920.31			9,048.51					
ORE MINED AND MILLED										
First of Year	$242,411.02			$186,159.00						
Last of Year	248,294.13	Cr. 5,883.11	$ 584,420.31	242,411.02	Cr. 56,252.02	$592,589.32	$3.78	$3.64	$.1751	$.1845
MILLING										
Labor		$ 74,436.26			$ 70,510.11					
Supplies		197,371.00			188,251.16					
Power		11,221.77			10,746.83					
Depreciation		39,913.72	$ 322,942.75		38,966.56	$308,474.66	2.09	1.90	.0967	.0960
ADMINISTRATION										
Labor and Supplies		$177,637.07			$179,502.14					
Depreciation		13,372.72	$ 191,009.79		12,656.15	$192.158.29	1.24	1.18	.0572	.0600
			$1,098,372.85			$1,093,222.27	$7.11	$6.72	$.3290	$.3405
Mine Yearly Concession Expense			—0—			11,082.46	...	.07	....	.0034
			$1,098,372.85			$1,104,304.73	$7.11	$6.79	$.3290	$.3439
Credit for Gold			694,151.01			754,350.93	4.49	4.64	.2079	.2350
			$ 404,221.84			$ 349,953.80	$2.62	$2.15	$.1211	$.1089

Honduras Operating Costs

Operating Costs as given in detail on preceding page show a decrease from 1937 of $5,931.88.

Smaller tonnage, higher grade ore treated, and additional exploration work, resulted in somewhat higher per ton costs.

Average Number of Men Per Day

	1938		1937	
Number of days	308		306	
Mine	712.97	Men	736.89	Men
Mill	78.98	"	75.67	"
Administration	34.52	"	33.00	"
Surface and Construction	74.39	"	70.76	"
Hotel	5.00	"	5.00	"
Laboratory	3.00	"	2.62	"
Electrical	45.14	"	44.38	"
Mechanical	41.39	"	35.61	"
Police, San Juancito	27.00	"	27.00	"
Police, Rosario	20.00	"	20.00	"
Totals	1,042.39	"	1,050.93	"

THE MINE

Ore Reserves

The detail of the following summary for 1938 is shown in Annex "A":

Comparative Summary—Active Ore Reserves

Based on Silver at 40 cents and Gold at $35.00 per Troy oz.

	Tons of Ore Plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1939	720,051	26.75	.1769	19,262,102	127,398
January 1, 1938	705,016	27.64	.1871	19,491,275	131,916
Increase	15,035				
Decrease		.89	.0102	229,173	4,518

Comparative Summary—Inactive Ore Reserves

	Tons of Ore Plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1939	20,154	11.00	.07	225,319	1,326
January 1, 1938	40,654	14.00	.05	553,319	1,941
Increase			.02		
Decrease	20,500	3.00		328,000	615

New development on the Carmen and Southwest veins resulted so favorably that their reserves have been transferred to the Active list. Development on them, on Jucuara No. 1 and on branches of the Salvador contributed largely to new reserves to offset the 1938 depletion.

No new veins of apparent importance were discovered notwithstanding the most extensive exploration in the Company's history.

Ore Production

Annex "D", showing detail of ore production, is summarized below, and comparison made with former years.

	1938	1937	1936	1935	
From Stoping	120,094	122,669	121,996	105,548	tons
From Development	34,407	39,679	44,802	51,327	"
Total	154,501	162,348	166,798	156,875	"

Ore from development amounted to 22.3% or 2.1% less than the previous year. Present indications are that development ore during 1939 will keep pace with 1938.

Exploration and Operating Connections
Summary of Annex "C"

Year	Drifts	Crosscuts	Raises	Winzes	Total Ft.
1938	11,690	11,323	8,100	..	31,113
1937	13,591	9,935	8,578	33	32,137
Increase		1,388			
Decrease	1,901		478	33	1,024

	1938	1937	1936	1935
Development Feet Driven	31,113	32,137	29,523	34,945

Although total development footage is somewhat lower than the 1937 figure, exploration crosscutting in search of new veins was greater than ever before.

It is proposed to carry on equally heavy exploration during 1939.

Operating Crosscuts & Raises
Below the Peña Blanca Level

The material handling raise for the Santa Fe section, known as shaft raise No. 3, was connected to the Upper 150 or Peña Blanca Level during the latter part of the year. The shaft timbering, together with the station crosscuts, being almost completed, this shaft should be in operation by the end of February.

An exploration and operating crosscut was driven 440 feet in a northwesterly direction on the Lower 650 level from the west end of the Santa Fe No. 2 vein in Block 92. The San Benito No. 2 vein was cut at a distance of 140 feet and the Santa Fe No 1 at 405 feet. Where cut, these veins show little value, but further development is planned to determine the possibility of commercial ore at this horizon; also to facilitate extraction of ore known to exist below the Lower 500 ft. level.

Operating Crosscuts and Raises
Above the Upper 150 ft. Level

A crosscut southeast in Block 89 from the Jucuara-Salvador crosscut was begun and driven 300 feet to its objective,—connection with shaft raise No. 3.

The material handling raise for the Jucuara No. 1-Fortuna vein above the Peña Blanca level, now known as shaft raise No. 5, was connected to the adit crosscut on the Upper 800 ft. level. The

work of timbering this shaft raise is under way and it should be in full operation early in 1939.

An adit level crosscut on the Upper 800 horizon was started and driven 110 feet, connecting with shaft raise No. 5, thus giving an outlet to the surface near the outcrop of Jucuara No. 1 vein.

Operating Crosscuts and Raises Below the Upper 150 ft Level.

Lower 200 Jucuara No. 1

This exploration crosscut, started in Block 69, was continued for a further 578 feet in a southeasterly direction cutting the downward extension of the Veta No. 4 South at 630 feet from the Carmen vein. Some 300 feet of development on the Veta No. 4 discloses a well defined vein with short stretches of fair grade ore. The Zero level will be developed after raises are driven to the Peña Blanca level. Drifting on the vein is being continued on the Lower 200.

Lower 200 San Blas No. 2 Crosscut

It was mentioned in last year's report that this crosscut, started in Block 79, would be continued during 1938 to its objective, the San Blas vein No. 1. It was advanced but 45 feet and stopped to favor more attractive exploration in the Southwest vein country. When convenient it will be extended another 250 feet to explore thoroughly the territory lying between the Salvador and San Blas veins.

Lower 300 Southwest Vein

The crosscut from the Southwest vein in Block 72 was driven a further 797 feet with disappointing results. Some 250 feet still remain to eliminate the territory between the Southwest vein and the San Joaquin. It is proposed to stop this crosscut upon reaching the western extension of the San Joaquin vein and connect by means of a raise with the old Lower 300 San Joaquin level. This will facilitate exploration work outlined for the year from the San Joaquin workings at that horizon.

Lower 300 Jucuara-Carmen

From the eastern extremity of the Lower 300 Jucuara No. 1 vein in Block 68 a crosscut of 104 feet in length was driven due east to cut the downward extension of the Carmen. Approximately 250 feet of drifting north and south shows a strongly oxidized loose vein with pockets of fair grade ore. Further development is necessary to prove the Carmen values at this level.

The Carmen No. 2 was intersected 100 feet back of the main Carmen and is even less encouraging than on the Lower 200.

Lower 300 Salvador

In Block 95, from the west end of the supposed Salvador vein extension, a crosscut south was driven 188 feet to cut any further possible westerly extension of the Salvador as mentioned

in the report for 1937. At approximately 180 feet the crosscut ran out of the usual ore bearing andesite and the crosscut is temporarily discontinued pending completion of more important crosscuts.

Lower 300 Salvador-San Blas

A crosscut south in Block 79 was driven 50 feet for the purpose of proving up the San Blas No. 2 vein at this level. The small amount of development carried out reveals a narrow hard vein of low grade.

Lower 300 Salvador-Fortuna

A short crosscut was driven in Block 73 from the Salvador vein to cut the Fortuna at this elevation. Drifting on the vein opened up a short length of high grade stringers on which stoping has been commenced.

Lower 300 Santa Fe No. 1

150 feet of crosscutting due north in Block 93 from the west end of the Santa Fe No. 1 vein was completed during the year to explore the country between this vein and the Independencia. The crosscut was temporarily stopped, but it is proposed to carry it through to the Independencia as conditions permit.

Lower 300 Independencia Crosscut

This crosscut, mentioned in last year's report as having been started from the Independencia vein in Block 83, was discontinued early in the year and an advance of only 20 feet was made. A small amount of drifting was effected on stringers encountered near the Independencia, but none proved interesting. The crosscut will be continued later as far as the San Blas No. 1.

Lower 400 Salvador-Fortuna

In Block 74, from the Salvador vein, a crosscut was driven 102 feet to the Fortuna vein. Development accomplished indicates that stoping ore may not be expected at this level.

Lower 400 Jucuara No. 2

Between Blocks 91 and 92 on the Lower 300 ft. level a pocket of high grade ore was opened up away from the Jucuara No. 2 proper. To prove its continuity downward a crosscut was driven on the Lower 400 ft. level in Block 91 for a distance of 190 feet with disappointing results.

Lower 400 Aguacatal

The main crosscut was driven 670 feet in a southeasterly direction, encountering somewhat loose ground carrying various stringers of practically no value. Although the crosscut is being driven continuously, the total length to date being some 1,400 feet, the prospect of striking ore bodies is discouraging. It will, however,

be continued to explore fully the western extension of surface prospect stringers.

From this main crosscut a branch was started at 650 feet from the portal and driven slightly west of south a distance of 547 feet in close grained rhyolitic rock containing abundant pyrite. The remote possibility of ore occurring in this formation caused the crosscut to be shut down at the close of the year in favor of expediting progress in the main crosscut.

Lower 500 Jucuara No. 2

For the purpose of locating the Jucuara No. 4 vein at this level a crosscut was put in for a distance of 100 feet. The vein was not encountered and undoubtedly joins Jucuara No. 2 somewhere between the Lower 400 and Lower 500 ft. levels.

Also on this level a crosscut was driven 59 feet from Block 89 to locate the possible eastern extension of a high grade stringer branching from the opposite wall of Jucuara No. 2. Nothing having been cut, the crosscut was discontinued.

Exploration Crosscuts
Above the Upper 150 ft. Level
Upper 450 Jucuara No. 1

The crosscut from Block 78 on the Upper 450 ft. level to cut the Salvador vein was driven 476 feet during the year. On the Salvador vein being encountered and showing little value, the crosscut was continued to the San Blas No. 2. Active development was pursued on this vein, disclosing a length of 300 feet carrying good gold values, in a narrow vein, which augments materially the reserve in it to 16,689 tons.

The exploration crosscut commenced in Block 79 on the Upper 450 ft. level was turned due north and driven a distance of 365 feet. In Block 80 the probable upward continuity of the Jucuara No. 2 was cut. As this occurred late in the year it allowed of only some 100 feet of development, but the consistent gold values encountered are encouraging. Work on these drifts will be given preference during the coming year as the discovery at this point is of importance, being some 500 feet east of the eastern extremity of the Jucuara No. 2 vein on the lower levels.

In Block 70, also on the Upper 450 ft. level, 398 feet of crosscutting was driven to explore the territory intervening between the eastern extremity of the Jucuara No. 1 vein and the No. 4 North and South veins. Nothing of importance has been cut, but the crosscut will be brought to its completion when connecting with the Veta No. 4 North this month. That connection will afford easy access to the country of the No. 4 North and South, and Porvenir veins, and will facilitate supervision and the handling of supplies and material.

Upper 350 Salvador-San Blas

Development of the San Blas No. 2 vein on this level was permitted by the driving of a crosscut 160 feet from the Salvador in Block 79. Drifting on the vein amounted to 170 feet carrying

the same good gold content as on the Upper 450 ft. level. Work on this vein will be expedited in order to ascertain fully the extent of the ore at this elevation.

Upper 350 San Benito

A crosscut was driven in a northerly direction 217 feet in Block 82 towards the Independencia. The crosscut has not yet reached its objective, which is the upper reaches of a slightly developed low grade vein on the Upper 150 level off the Esperanza crosscut. It will be continued during the year.

From this same level in Block 84 a crosscut 105 feet in length was driven in a southwesterly direction to pick up, if possible, the faulted section of the San Benito vein. At 85 feet a well defined fissure was exposed, but proved to be erratic in value when drifted on. Further work is contemplated.

Upper 150 Aguacatal

290 feet of crosscutting in a southwesterly direction proved disappointing, with no change in ground. This formation being distinctly unfavorable for the occurrence of ore bodies, the crosscut was abandoned 1,714 feet from the portal. 390 feet ahead were explored with a diamond drill, but no change in country rock was encountered.

The crosscut west from the main one and 1,075 feet from its portal, in which some unsatisfactory diamond drilling was done during the year, was driven 365 feet. It is intended to continue this crosscut some 500 feet, in which distance it is hoped the formation may change and become more favorable for ore occurrence.

Upper 150 Jucuara-Santa Gertrudis No. 2

A crosscut 149 feet in length in Block 80 from the Jucuara No. 1 exposed the Santa Gertrudis No. 2 vein. Drifting on a well defined vein proved values to be erratic. Work will continue in order to determine the existence of ore.

Upper 150 Southwest

A crosscut to prove up part of the area east of the West Main Crosscut and north of the Southwest vein was begun in Block 75 and advanced in a northeasterly direction for a distance of 816 feet and then turned due north to parallel the Lower 300 Southwest crosscut 100 feet east of it. The north section was driven 315 feet making a total of 1,131 feet of exploration crosscut. Various small unimportant stringers were cut. The crosscut has been stopped pending completion and results of the Lower 300 crosscut through the same area.

In Block 70 from the above crosscut a branch crosscut was carried out due east for a length of 190 feet without encountering veins or stringers of value. This crosscut is being continued in the hope of encountering branches off the West or San Miguel veins.

The country traversed by the Lower 300 and Upper 150 Southwest crosscuts was looked upon as very favorable for the discovery of new veins. Exploration to date has been disappointing.

Aurora-Santa Elena Exploration

Clephane Vein

35 feet additional drifting was done on this vein. Although this work had to be abandoned temporarily the vein formation and country rock warrant further investigation of the Clephane, preferably at a higher elevation.

Santa Elena Vein

The lowest old crosscut to this vein was reopened and 242 feet of drifting by hand exposed a fairly strong and well mineralized vein, but too low in value to make ore. The drift is being continued in the hope of developing ore under the old stopes worked by previous owners.

Zopilotera Vein

A small body of ore was developed on this vein in 1927. In connection with other work going on in that section during 1938, it was decided further to prospect the Zopilotera and other veins more or less parallel to it, but at greater depth. A crosscut was planned to cut the Zopilotera 200 feet below the old level. It was advanced by hand drilling 642 feet and should enter one or two veins within the next 150 feet. The Zopilotera should be cut approximately 1,600 feet ahead of the present crosscut face, and it is proposed to continue driving on this vein at the rate of 250 feet a month.

General Exploration Plan for the Year 1939

In addition to completing the unfinished exploration crosscuts mentioned above, several new entrances into unexplored territory are planned as follows:

1. Crosscut north from the Lower 300 San Joaquin vein to explore at depth the San Vicente vein and other nearby surface prospects. After progressing 800 feet it is planned to turn the crosscut northwest and drive it more or less parallel to the old Upper 150 Crucero crosscut and well into the virgin ground north of the Crucero gulch where outcrops, although poor on the surface, exist.
2. Two crosscuts from the Lower 300 Rosario vein in the vicinity of Block 23—one practically south and the other northwest to explore the area between the Rosario and Colonia veins.
3. Crosscut southwest from the Lower 300 Rosario vein in the vicinity of Block 44; to be turned later due west to explore the Culebra and Esperanza vein country at the Lower 300 elevation.
4. A crosscut east from the Upper 450 Porvenir vein to explore the territory west of the Culebra. This was proposed for 1938, but was postponed pending better operating facilities to be completed in February of this year by level connection between the Upper 450 Jucuara No. 1 and the Porvenir as explained previously in this report.

5. Continuation of Crosscut 11 in Block 91 from the Lower 200 Jucuara No. 2, but turned northeast to intersect the vein encountered by the West-Southwest crosscut on the Peña Blanca level in Block 85.
6. Crosscut east on the Lower 200 from the south end of the Carmen in Block 67.
7. Crosscut northeast on the Upper 450 ft. level from the Jucuara No. 1 in Block 73, towards the Catalina vein section.

It is hardly to be expected that work on all the above exploration will be continuous, but it is hoped that the end of the year will show some progress on each crosscut.

VEIN DEVELOPMENT AND STOPING

Veins Worked in 1938

The ore obtained in 1938 was produced from 25 veins of which 92% came from the Salvador, Jucuara Nos. 1, 2, 3 and 4, Santa Fe Main, Nos. 1, 2 and 3, Independencia, San Benito Nos. 1 and 2, and the Carmen. The San Blas No. 1 and 2, Santa Gertrudis No. 1, Southwest Nos. 1 and 2, San Joaquin, Porvenir, Veta 4 North and South, Jucuara No. 5, No. 56 Fault and the Capitana contributed the small remaining percentage.

Salvador Group

Salvador Vein

Tonnage amounting to 19,523 was extracted from the Salvador and its branches. As approximately 37% of this was derived from development of good grade ore the unbroken reserve has again been augmented and now shows some 34,000 tons of slightly lower grade as against 25,700 tons for the year ending 1937.

Jucuara No. 1-Fortuna Vein

The production of 34,606 tons from this vein makes it again the greatest single producer for the year. Stoping operations yielded 29,669 tons. It is proposed to draw as heavily as possible during 1939 from low gold-bearing veins such as Jucuara No. 1, Salvador, and Carmen, and conserve other veins having a higher gold content.

Carmen Vein

Intensive development on the Lower 200 and Zero levels, with connecting raises, produced 4,622 tons; from stopes, 494 tons, making a total tonnage of 5,116.

Due to the development achieved, a blocked out reserve of 25,849 tons has been included in the active reserve list showing ore of fair grade which will be worked on a conservative basis during the present year.

Independencia Group

Independencia Vein

The extraction of 7,189 tons, nearly all from stopes, leaves a small reserve of 8,174 tons of medium grade ore which will be stoped when convenient.

San Blas No. 2 Vein

The opening up of this vein on the upper levels resulted in a further addition of low grade tonnage and for the same reason as given in the report of last year it shows some 16,600 tons reserve included in the active list, an increment of some 7,800 tons over that of the previous year. Production amounted to 1,620 tons of which 1,020 came from development. Although the vein itself is relatively good grade, its narrow width will result in excessive dilution and the net broken ore will be low grade.

Santa Fe Group

San Benito No. 1 Vein

From stoping operations a tonnage amounting to 4,263 was extracted. Exploration work on the upper levels as mentioned elsewhere, is being carried out, but it is impossible to predict that the present reserve of 4,696 tons will be materially increased.

San Benito No. 2 Vein

Production yielded 6,252 tons of which 5,116 tons came from stopes of comparatively low grade, leaving an unbroken reserve of 27,364 tons averaging 34 ozs. silver and .38 oz. gold per ton. The field for development on the San Benito No. 2 has now been almost eliminated with the exception of the Lower 650 and raises to the Lower 500.

Santa Fe No. 1 Vein

Of the 5,741 tons produced, a tonnage of 2,260 was acquired from development. Notwithstanding that 3,481 tons were derived from stopes, owing to the good grade of ore exposed by development, the reserve in this ore body has been increased by some 6,000 tons over that of last year, now realizing a total of 49,348 tons with a gold value of 0.17 oz. per ton. Further development remains to be executed on the Lower 650 level.

Santa Fe No. 2 Vein

Production amounted to 10,234 tons, the small portion of 293 tons being from development.

A reserve of 61,000 tons of excellent grade ore, high in gold, still remains, which will not be extracted until necessity arises.

Santa Fe No. 3 Vein

Steady stoping on a small scale was continued during the year, 5,513 tons being produced, of which only 110 came from development. A reserve of 14,765 tons of good grade still exists.

Jucuara Group

Jucuara No. 2 Vein

This was the second largest producer for the year, 31,349 tons being extracted. Further knowledge was gained by the active driving of raises from the Lower 650 and the Lower 500 levels which also allowed the inclusion of 4,697 tons of high grade ore from development. As mentioned under exploration crosscuts, the discovery of the probable upward continuity of the Jucuara No. 2 vein on the Upper 450 level is of importance. On that level development will be actively pursued to define the new limits of this vein.

Stoping operations will be confined to finishing stopes already commenced, hence production from this vein will be less than in 1938. A reserve of approximately 139,000 tons of high grade ore is shown.

Jucuara No. 3 Vein

This vein was not worked during 1938, the tonnage of 4,415 produced being obtained from the broken ore in stopes reserve. 10,204 tons of blocked-out gold ore remains as of 1937.

Jucuara No. 4 Vein

This vein was depleted to the extent of 4,572 tons, 4,355 being from stopes. The non-discovery of the Jucuara No. 4 on the Lower 500 level forces the conclusion that the lower limits of this ore body lie above the Lower 500 and, therefore, offers little hope of adding to the existing reserve of 22,579 tons.

Jucuara No. 5 Vein

Worked on a small scale, this vein produced the small tonnage of 464, all from stopes. A small reserve of 2,160 tons of low grade remains.

No. 56 Fault Vein

The low tonnage of 267 tons from stopes now eliminates this vein, as the blocked out reserve shown in 1937 has been included with that of Jucuara No. 2 vein. Where these two veins intersect it will be worked as one vein and hence the decision made that remaining ore in 56 Fault vein should be absorbed in Jucuara No. 2.

Old Mine Group

Capitana Vein

The reason that only 49 tons were produced from stopes still obtains as explained in the 1936 and 1937 reports.

San Joaquin Vein

Stoping operations produced 1,561 tons. Work during 1939 will be on a conservative basis as the few scattered reserves do not permit of intensive stoping.

Southwest No. 1 Vein

The opening of this vein, formerly known as the Southwest, on the Lower 200 level by means of a crosscut from the Santa

Gertrudis, brings about the inclusion of 11,707 tons of good grade ore under active reserves. A raise driven from the Lower 200 to the Zero level, proving good grade ore for 130 feet, found the Zero level to be caved. A second raise will enter the Zero level in unstoped ground from which work will be actively pushed to develop fully that level together with drifting and raising on the Lower 200. Tonnage amounting to 2,022 was produced, all from development. The probability of developing considerable new ore on this vein is considered excellent.

Separate ore and waste passes are now being driven from the Lower 650 haulage level to the Lower 300 to cheapen the tramming costs from this section.

Southwest Vein No. 2

Development from a raise driven from the Lower 300 level gave but 238 tons. Although further development is warranted it is too soon to make predictions as to its merits. On the Lower 200 this vein lies 50 feet in the footwall of the Southwest No. 1.

Miscellaneous Group

Veta No. 4 North

1,599 tons of comparatively low grade ore were extracted, the bulk being obtained from stopes. It has few earmarks of ever becoming an important producer.

Veta No. 4 South

Some 300 feet of drifting on the Upper 450 level together with raises from the Upper 350 level, exposing ore of medium grade, produced 1,873 tons from development. The result of development to date permits an addition of 7,387 tons to the ore reserves realizing a total of 20,081 tons of slightly lower grade than that of last year. Further development is planned to exploit the upper reaches of this vein as well as the undeveloped block between the Peña Blanca level and the Lower 200.

Santa Gertrudis No. 1 Vein

Continuous driving of raises connecting the Lower 300 ft. level with the Upper 150 or Peña Blanca level together with 300 feet of drifting on the Lower 200 ft. level, exposing ore of fair grade, permitted an addition to the ore reserves which now show a total of 17,636 tons.

Active driving of the Lower 200 and Zero levels to expose the limits of this ore body to the south is proposed for 1939.

Production amounted to 2,047 tons, all from develpment.

Santa Gertrudis No. 2 Vein

200 feet of drifting on the Peña Blanca level disclosed a strong well formed vein, but too low grade to make ore. Notwithstanding discouraging results on both the Upper 250 and Upper 150 ft. levels, the strength of this vein and its proximity to Jucuara No. 1 warrant additional development on the Peña Blanca level and a crosscut to it from the Lower 300 ft. Jucuara No. 1.

THE MILL

Tonnage Crushed

	1938	1937
Total wet tons received	168,800.12	177,800.31
Average per cent of moisture	8.4704	8.691
Total dry tons milled	154,500	162,500
Average tons milled per day (365 days)	423	445
Average tons milled per day, full running time	485	493
Average tons milled per day, per 1850 lb. stamps	24.3	24.7
Number of 1,850 lb. stamps	20	20
Total tons treated by mill to Dec. 31st, 1938.	3,138,208	2,983,708

Recovery

	1938	1937
Average ounces silver received per ton	23.9905	21.9945
Total ounces silver produced	3,706,540	3,574,116
Average ounces silver recovered per ton	21.5862	19.7560
Total ounces silver recovered	3,335,067	3,210,337
Average silver recovery, per cent	89.9779	89.8219
Average ounces gold received per ton	.1401	.1457
Total ounces gold produced	21,648	23,675
Average ounces gold recovered per ton	.1289	.1336
Total ounces gold recovered	19,916	21,717
Average gold recovery, per cent	92.0079	91.7288

Treatment Period Detail

	1938				1937			
	Hrs.	Min.	Ag. %	Au. %	Hrs.	Min.	Ag. %	Au. %
Extraction by Crushing Solution	9	00	39.44	76.19	9	00	40.39	73.55
Extraction by Agitation	87	48	50.58	16.56	84	36	50.99	20.57
Extraction in Slimes Presses	1	05	1.88	1.61	1	05	.17	.29
	97	53	91.90	94.36	94	41	91.55	94.41
Less Dissolved Value Loss			1.92	2.36			1.73	2.68
Recovery			89.98	92.00			89.82	91.73
Per Cent Sand not passing 150 Mesh			28.03				27.40	

POWER

Rainfall	1938	1937
Total rainfall, inches	54.87	62.57
Number of rainy days	203.	180.
Greatest monthly rainfall, inches	12.24 (Oct.)	14.92 (Sept.)
Lowest monthly rainfall, inches	.08 (Mar.)	.36 (Feb.)
Greatest single rainfall, inches	2.52 (Oct.)	2.92 (Sept.)

Comparative Statement

On Consumption of Mill Supplies

	1938					1937				
	Amount Consumed	Total Cost U. S. Cy.	Cost Per Unit	Cost Per Ton Crushed	Cost Per Fine Oz. Bullion Produced	Amount Consumed	Total Cost U. S. Cy.	Cost Per Unit	Cost Per Ton Crushed	Cost Per Fine Oz. Bullion Produced
				(Tons) 154,500	(Ounces) 3,354,982.51				(Tons) 162,500	(Ounces) 3,232,054
Cyanide (100% KCN)	995,667 lbs.	$87,561.30	$.0879	$.5667	$.0261	610,513 lbs.	$73,970.96	$.1212	$.4552	$.0229
Sulphur	259,545 "	11,251.99	.0434	.0728	.0033	254,110 "	11,340.16	.0446	.0698	.0035
Zinc Dust	123,143 "	15,056.86	.1223	.0975	.0045	130,067 "	17,765.51	.1366	.1093	.0055
Muriatic Acid	10,465 "	1,951.88	.1865	.0126	.0006	12,880 "	2,450.20	.1902	.0151	.0008
72" Filter Canvas	4,386 yds.	3,769.67	.8595	.0244	.0011	4,940 yds.	4,970.93	1.0062	.0306	.0015
Lime	3,228,143 lbs.	22,193.59	.0069	.1436	.0066	2,701,364 lbs.	18,399.28	.0068	.1132	.0057
Borax Glass	4,800 "	914.14	.1904	.0059	.0003	4,500 "	888.71	.1975	.0055	.0003
Soda	784 "	50.16	.0640	.0004	....	1,008 "	58.47	.0580	.0004	....
Fuel Oil	6,779 gals.	1,807.26	.2666	.0117	.0005	6,507 gals.	2,057.96	.3163	.0127	.0006
Steel Balls	112,381 lbs.	5,389.77	.0480	.0349	.0016	94,622 lbs.	4,940.74	.0522	.0304	.0015
Crusher & Battery Shoes and Dies	38,900 "	3,662.05	.0941	.0237	.0011	36,755 "	3,416.20	.0929	.0210	.0011
Tube Mill and Ball Mill Liners	89,122 "	11,944.24	.1340	.0773	.0036	91,694 "	12,259.52	.1337	.0754	.0038
		$165,552.91		$1.0715	$.0493		152,518.64		$.9386	$.0472

POWER DISTRIBUTION

	1938		1937	
	Kilowatt Hours	K.W. Hrs. Per Ton	Kilowatt Hours	K.W. Hrs. Per Ton
Ventilation	14,741	.095	17,335	.107
Mine Power	2,030,348	13.141	2,199,835	13.537
Electric Haulage	192,260	1.244	182,265	1.122
Blacksmithing	19,740	.128	33,510	.206
Mine Lights	61,403	.397	49,130	.302
Hoisting	20,727	.134	16,460	.101
Mill Power	5,572.759	36.070	5,756,360	35.424
Mill Lights	59,598	.386	57,945	.357
Surface Lights	525,478	3.401	493,970	3.040
Surface Power	25,611	.166	23,325	.143
Machine Shop	101,425	.657	123,965	.763
Laboratory	17,900	.116	15,420	.095
Totals	8,641,990	55.935	8,969,520	55.197
Power Production by:				
San Juancito Plant		49.00%		52.15%
Guadalupe Plant		40.25%		42.02%
Aguacatal		10.75%		5.83%
		100.00%		100.00%

COST OF POWER PRODUCTION

	1938			1937		
	Amount U. S. Cy.	Per Ton	K.W. Hour	Amount U. S. Cy.	Per Ton	K.W. Hour
Labor	$12,269.21	.07941	.0014197	$11,973.47	.07368	.0013349
Supplies	4,775.61	.03091	.0005526	4,514.51	.02778	.0005033
Totals	$17,044.82	.11032	.0019723	$16,487.98	.10146	.0018382

Based on Horsepower Generated:

	1938	1937
Horsepower Hours	11,584,437	12,023,485
Cost per Horsepower Hour	$ 0.001471	$ 0.001371
Cost per Horsepower Year	12.88596	12.00996
Cost per Horsepower Year, Increase	.87600	1.684296

It is expected that one of the Diesel units, mentioned previously, will be ready for operation by the middle of February, and the second one, early in March.

In order to effect a substantial cut in the cost of Diesel oil, delivery is to be made from tank trucks into a supply tank now being erected on the Tegucigalpa side of the mountain and delivery to the plant will be effected by means of a pipe line through the mine.

OTHER DEPARTMENTS

Medical Department

	1938	1937
Cost of Maintenance	$ 7,044.78	$ 8,378.51
Total consultations, examinations and treatments	11,250	10,630

Assay Office and Laboratory

	1938	1937
Total number of assays run	37,060	32,700
Average number of assays per day	102	90
Total Cost	$11,388.68	$ 9,331.93
Cost per Assay	.31	.29

Schools

	1938	1937
Average daily attendance during year:		
Boys' School	149	160
Girls' School	143	135
Rosario Mixed School	30	36
La Reforma Mixed School	27	31
Rosario Foreign School	9	8
Total Expense—Native Schools	$12,035.57	$11,251.56
Total Expense—Rosario Foreign School	1,980.07	2,075.80
Total Expense—Native and Foreign Schools	$14,015.64	$13,327.36
Increase	$ 688.28	

Police and Garrison

	1938	1937
Total maintenance expense	$16,017.34	$15,954.08
Increase	63.26	

Hotel

	1938	1937
Total number of meals served	24,573	24,133
Total cost	$12,283.92	$11,334.18
Cost per meal	.50	.47

Roads

	1938	1937
Total maintenance	$ 5,448.43	$11,148.05
Decrease	5,699.62	

It is expected that the cost of road maintenance during 1939 will be about $5,000.00 higher than in 1938.

Agencies

	1938	1937
Total expense	$3,927.04	$3,975.01
Decrease	47.97	

EXPANSION

The Santa Lucia Mine, adjoining Rosario holdings on the south, was taken under option early in the year. Results of 2,866 feet of exploration, effected by means of a portable Diesel compressor, are not encouraging. March of this year should see the completion of the exploration planned. $28,259.39 U. S. Currency were expended under the option.

Other expansion expenses amounted to $99.07 making a total for expansion of $28,358.46.

An engineer was kept in the field throughout the greater part of the year in search of likely prospects, but nothing of merit was found.

CONCLUSION

The chief problem of the year was the power shortage which, during several months, caused a serious curtailment of production. The entire staff is to be commended for the effective manner in which it met this problem, as shown by the production results for the year.

This opportunity is taken to acknowledge the cooperation and advice received from the Officers and Board of Directors in maintaining the property in its present enviable condition.

Respectfully submitted,

K. H. MATHESON,
General Manager.

Annex "A"—Active Ore Reserves

ESTIMATED RESERVES (13 and 14 cut ft. per ton)	Average Width Feet			Tons of Ore Plus	Av. Troy ounces Per Ton		Total Troy ounces	
Veins	Vein	Waste	Stope	Waste	Ag.	Au.	Ag.	Au.
Independencia Group								
Independencia	1.71	1.77	3.48	8,174	17	.05	135,860	411
San Blas No. 2	1.18	1.66	2.84	16,689	12	.08	202,366	1,380
Salvador Group								
Salvador	1.68	1.82	3.50	34,288	21	.06	708,715	2,045
Jucuara No. 1 (Fortuna)	2.51	1.62	4.13	176,500	29	.06	5,075,357	10,838
Fortuna-North	1.87	1.49	3.36	2,630	21	.04	54,769	105
Fortuna Vein	2.27	1.39	3.66	6,106	29	.04	176,004	270
Carmen	2.48	1.66	4.14	25,849	18	.04	463,461	1,025
Jucuara Group								
Jucuara No. 2	2.97	2.36	5.33	139,180	26	.30	3,549,270	41,247
Jucuara No. 3	1.73	2.11	3.84	10,204	12	.26	118,166	2,625
Jucuara No. 4	2.71	1.39	4.10	22,579	28	.10	639,728	2,180
Jucuara No. 5	2.60	1.90	4.50	2,160	14	.10	31,200	212
Santa Fe Group								
Santa Fe No. 1	1.90	1.76	3.66	49,348	23	.17	1,142,087	8,177
Santa Fe No. 2	2.75	2.53	5.28	61,052	45	.44	2,777,807	26,929
Santa Fe No. 3	2.19	1.81	4.00	14,765	29	.34	433,544	4,967
San Benito No. 1	.99	2.01	3.00	4,696	16	.18	74,137	847
San Benito No. 2	1.71	1.51	3.22	27,364	34	.38	937,885	10,343
Old Mine Group								
San Joaquin	1.83	1.17	3.00	959	38	.70	36,443	667
Colonia	1.01	2.08	3.09	8,980	15	.13	130,939	1,169
Colonia No. 2	1.38	1.62	3.00	1,602	11	.10	17,541	163
Capitana	.81	2.19	3.00	2,285	3	.28	6,664	639
South West	3.57	1.67	5.24	11,707	29	.09	338,875	1,108
Other Veins								
Veta No. 4 South	1.47	1.53	3.00	20,081	20	.03	406,709	608
Santa Gertrudis	1.24	1.76	3.00	17,636	15	.07	258,499	1,160
TOTALS				664,834	26.65	.1792	17,716,026	119,115

Broken Ore in Stopes

BROKEN ORE RESERVES (20.5 cu. ft. per ton) **Veins**	
Independencia	369
Salvador	11,007
Jucuara No. 1—(Fortuna)	25,934
Santa Fe No. 1	2,014
Santa Fe No. 2	2,342
Santa Fe No. 3	1,971
Jucuara No. 2	2,992
Jucuara No. 3	1,811
San Benito No. 1	1,031
San Benito No. 2	2,319
San Blas No. 2	1,054
Capitana	312
San Joaquin	831
Mine Storage Chutes	747
Mill Ore Bin	483
TOTAL	55,217

Summary—Active Reserves

Estimated Ore at 13 and 14 cu. ft. per ton	664,834	26.65	.1792	17,716,026	119,115
Broken Ore in Stopes at 20.5 cu. ft. per ton	55,217	28.00	.1500	1,546,076	8.283
Total Active Reserves as of Jan. 1, 1939	720,051	26.75	.1769	19,262,102	127,398

Annex "B"—Inactive Ore Reserves

ESTIMATED ORE RESERVES (13 cu. ft. per ton) **Veins**	Tons of ore plus waste	Av. Troy Ozs. per ton Ag.	Au.	Total Troy ounces Ag.	Au.
Esperanza (So. San Miguel Extension South)	5,450	14	.04	76,300	218
Porvenir	2,088	13	.03	27,189	53
Nuevo	8,450	9	.11	76,050	929
Veta No. 4—North	4,166	11	.03	45,780	126
Total Inactive Reserves as of Jan. 1, 1939	20,154	11	.07	225,319	'1,326

Annex "C"

Veins and Groups	Drifts	Cross-cuts	Raises	Total Feet
Independencia Group				
Independencia	149	107	59	315
San Blas No. 1	28	...	8	36
San Blas No. 2	592	265	106	963
Salvador Group				
Salvador	2,421	583	1,624	4,628
Jucuara No. 1 (Fortuna)	1,798	950	918	3,666
Carmen	1,676	97	864	2,637
Jucuara Group				
Jucuara No. 2	423	318	1,021	1,762
Jucuara No. 3	36	...	...	36
Jucuara No. 4	...	25	86	111
Santa Fe Group				
Santa Fe Main Vein	125	32	...	157
Santa Fe No. 1	874	230	501	1,605
Santa Fe No. 2	113	80	68	261
Santa Fe No. 3	44	...	...	44
San Benito No. 1	638	417	149	1,204
San Benito No. 2	156	...	449	605
Old Mine Group				
Southwest No. 1	540	97	104	741
Southwest No. 2	47	...	174	221
Termópilas	...	12	...	12
Other Veins				
Santa Gertrudis No. 1	396	...	492	888
Santa Gertrudis No. 2	197	...	...	197
Veta 4 North	181	32	...	213
Veta 4 South	821	7	467	1,295
Porvenir	193	...	...	193
Aurora Group				
Clephane	...	35	...	35
Santa Elena Group				
Santa Elena	242	79	...	321
Zopilotera	...	578	...	578
Esperanza-Jutiapa Raise	...	72	422	494
Shaft Raises				
Shaft Raise No. 3	...	...	370	370
Shaft Raise No. 5	...	...	178	178
Ore Pass 14	...	63	30	93
Waste Pass 11	...	50	10	60
Jucuara Crosscuts				
Upper 450—No. 12	...	538	...	538
Upper 450—No. 5	...	314	...	314
Upper 150—No. 10	...	217	...	217
Upper 150—No. 7	...	149	...	149
Lower 300—No. 52	...	86	...	86
Other Crosscuts				
Upper 150 Aguacatal	...	644	...	644
Lower 400 Aguacatal	...	1,225	...	1,225
Lower 200 Carmen—No. 6	...	578	...	578
Lower 300 Jucuara No. 1—No. 41	...	27	...	27
Upper 150 Southwest—No. 12	...	190	...	190
Upper 150 Southwest—No. 11	...	1,159	...	1,159
Lower 300 Southwest—No. 11	...	809	...	809
Lower 650 Santa Fe No. 1—No. 9	...	450	...	450
Station Crosscuts				
Upper 800 Level	...	141	...	141
Upper 550 Level	...	35	...	35
Upper 150 Level	...	500	...	500
Zero Level	...	64	...	64
Lower 200 Level	...	58	...	58
Lower 500 Level	...	10	...	10
TOTALS	11,690	11,323	8.100	31,113

ORE PRODUCTION

Annex "D"

From Stoping Operations: *Veins*	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Independencia Group													
Independencia	672	635	867	296	309	541	727	555	831	649	42	730	6,854
San Blas No. 1.....	...	...	...	...	...	94	123	81	171	256	90	...	815
San Blas No. 2.....	49	...	...	...	...	...	...	...	62	52	94	343	600
Salvador Group													
Salvador	1,444	831	956	634	362	561	838	819	1,282	1,523	2,222	756	12,228
Jucuara No. 1 (Fortuna)	2,874	3,481	2,415	1,756	1,406	1,220	1,406	2,018	3,242	2,759	2,955	4,137	29,669
Carmen	...	...	...	...	...	...	...	...	...	4	200	290	494
Jucuara Group													
Jucuara No. 2	1,226	1,161	1,610	1,383	1,523	2,749	2,148	2,960	3,205	3,188	2,467	3,032	26,652
Jucuara No. 3	311	432	498	972	2	110	563	41	410	266	446	358	4,409
Jucuara No. 4	730	306	564	159	184	182	347	226	256	377	706	318	4,355
Jucuara No. 5	...	...	31	81	66	116	170	...	...	...	...	...	464
56 Fault Vein	157	65	45	...	...	...	.	.	...	...	...	...	267
Santa Fe Group													
Santa Fe Main Vein	282	290	214	134	280	158	109	77	123	50	104	247	2,068
Santa Fe No. 1.....	280	427	256	345	...	105	414	57	42	351	671	533	3,481
Santa Fe No. 2.....	709	400	677	597	798	763	1,205	884	861	1,522	1,219	306	9,941
Santa Fe No. 3.....	394	295	481	558	609	755	429	285	484	482	282	349	5,403
San Benito No. 1.....	237	245	595	913	157	354	57	252	212	495	502	244	4,263
San Benito No. 2.....	218	389	781	469	61	1,067	517	538	360	70	152	494	5,116
Old Mine Group													
San Joaquin	235	242	140	11	...	124	187	128	170	219	59	46	1,561
Capitana	...	...	...	...	...	...	...	19	30	...	...	...	49
Miscellaneous Group													
Veta No. 4 North.....	59	160	350	344	492	...	...	..	...	...	...	...	1,405
STOPING TOTALS ..	9,877	9,359	10,480	8,652	6,249	8,899	9,240	8,940	11,741	12,263	12,211	12,183	120,094

From Development Operations:

Veins	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Independencia Group													
Independencia	152	...	...	...	...	...	...	...	183	...	...	...	335
San Blas No. 2	30	...	...	...	...	...	27	155	201	152	102	353	1,020
Salvador Group													
Salvador	717	838	352	401	538	833	712	768	727	434	558	417	7,295
Jucuara No. 1 (Fortuna)	455	674	329	22	95	207	388	548	287	790	514	628	4,937
Carmen	252	225	237	171	308	641	867	721	507	324	302	67	4,622
Jucuara Group													
Jucuara No. 2	1,259	971	675	6	21	196	366	352	90	317	131	313	4,697
Jucuara No. 3	...	...	...	...	...	...	...	...	...	...	...	6	6
Jucuara No. 4	...	134	...	...	...	...	...	...	...	...	...	83	217
Santa Fe Group													
Santa Fe No. 1	296	563	185	...	...	201	337	330	152	...	96	100	2,260
Santa Fe No. 2	...	139	64	...	...	42	...	8	40	...	...	...	293
Santa Fe No. 3	20	90	...	...	...	...	...	...	...	...	...	...	110
San Benito No. 1	322	58	12	...	...	...	...	...	153	193	192	90	1,020
San Benito No. 2	131	139	84	...	...	143	196	236	136	21	9	41	1,136
Old Mine Group													
Southwest	64	...	...	...	...	...	100	223	152	200	839	682	2,260
Miscellaneous Group													
Veta No. 4—North	30	...	...	...	...	...	...	8	4	129	...	23	194
Veta No. 4—South	140	102	26	...	...	204	321	450	128	248	...	254	1,873
Santa Gertrudis No. 1	143	167	323	79	36	150	432	285	135	12	56	215	2,033
Santa Gertrudis No. 2	...	...	...	...	...	...	...	...	...	...	5	9	14
Porvenir	78	...	...	...	...	7	...	...	...	...	...	...	85
DEVELOPMENT TOTALS	4,089	4,100	2,287	679	998	2,624	3,746	4,084	2,895	2,820	2,804	3,281	34,407
STOPING TOTALS	9,877	9,359	10,480	8,652	6,249	8,899	9,240	8,940	11,741	12,263	12,211	12,183	120,094
GRAND TOTALS	13,966	13,459	12,767	9,331	7,247	11,523	12,986	13,024	14,636	15,083	15,015	15,464	154,501

Annex "E"

TONNAGE MINED

From October 1, 1907, to January 1, 1939

Veins	Total including Stoping, Devel. & Filling Oct. 1, 1907 to Dec. 31, 1937	Total including Stoping Devel. and Filling For Year 1938	Grand Total including Stoping, Devel. & Filling January 1, 1939
Buena Ventura	98,490	.....	98,490
Candelaria Group	166,573	.....	166,573
Capitana	60,571	49	60,620
Carmen No. 1	18,997	5,116	24,113
Carmen No. 2	1,105	.....	1,105
Catalina	6,587	.....	6,587
Colonia No. 1	61,552	.....	61,552
Colonia No. 2	665	.....	665
Concepcion	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	106,245	.....	106,245
Esperanza	8,710	.....	8,710
Fortuna Group	95,073	.....	95,073
Guadalupe	61,177	.....	61,177
Independencia	280,581	7,189	287,770
Jucuara No. 1 (Fortuna)	138,177	34,606	172,783
Jucuara No. 2	73,864	31,349	105,213
Jucuara No. 3	33,151	4,415	37,566
Jucuara No. 4	15,343	4,572	19,915
Jucuara No. 5	1,437	464	1,901
56 Fault Vein	4,687	267	4,954
North	4,647	.....	4,647
Northwest	89,378	.....	89,378
Nueva	28,147	.....	28,147
Porvenir	2,900	85	2,985
Rosario	150,915	.....	150,915
Salvador	585,131	19,523	604,654
San Benito No. 1	105,039	5,283	110,322
San Benito No. 2	7,833	6,252	14,085
San Blas No. 1	6,123	815	6,938
San Blas No. 2	4,311	1,620	5,931
San Joaquin	68,843	1,561	70,404
San Luis	2,389	.....	2,389
San Miguel North	174,801	.....	174,801
San Miguel Group	125,855	.....	125,855
Santa Fe Main Vein	186,448	2,068	188,516
Santa Fe No. 1	12,076	5,741	17,817
Santa Fe No. 2	46,516	10,234	56,750
Santa Fe No. 3	29,427	5,513	34,940
Santa Gertrudis No. 1	32,109	2,033	34,142
Santa Gertrudis No. 2	1,739	14	1,753
Socorro	22,592	.....	22,592
Southwest No. 1	21,769	2,022	23,791
Southwest No. 2	397	238	635
Termópilas	1,094	.....	1,094
West	97,005	.....	97,005
Veta No. 4 North	9,333	1,599	10,932
Veta No. 4 South	4,512	1,873	6,385
Ore from Development	63,599	.....	63,599
Miscellaneous	5,380	.....	5,380
TOTALS	3,149,873	154,501	3,304,374

Summary to Annex "E"

From October 1, 1907, to January 1, 1939

From Stoping	2,542,193
From Development	526,780
From Fills	235,401
TOTAL	3,304,374

PRESS OF
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NEW YORK and HONDURAS ROSARIO MINING COMPANY



FIFTY-NINTH ANNUAL REPORT

NINETEEN HUNDRED AND THIRTY-NINE

REPORT of the
NEW YORK and HONDURAS
ROSARIO MINING COMPANY

NEW YORK

JANUARY 1, 1940

OFFICERS

WM. A. PRENDERGAST, *President*

H. A. GUESS, *Vice-President*

W. C. LANGLEY, *Treasurer*

J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

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M. F. SOTO

AMBROSE G. TODD

RICHARD H. VALENTINE

EXECUTIVE COMMITTEE

LEWIS L. CLARKE, *Chairman*

H. A. GUESS

IRVING HEIDELL

DR. J. RALPH JACOBY

M. F. SOTO

AMBROSE G. TODD

WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

PRESIDENT'S REPORT

February 26, 1940.

To the Stockholders and Directors of the
New York and Honduras Rosario Mining Company:

This is the Fifty-ninth Annual Report of the Company, and covers the year 1939.

I respectfully refer you to the report of our General Manager, Mr. K. H. Matheson, pages 17-38, which describes very completely the operations of the property during the past year, and the program for the year 1940.

Visit to Honduras

Last November I visited Honduras, spending a week in Tegucigalpa, and another at our property. It was very gratifying to meet and consult with President ~~Tuberci6~~ Tiburcio Carias A., who was most gracious in his attitude towards our Company.

This visit enables me to report that the plant at San Juancito is in excellent condition; the wisdom of the policy of adequate maintenance, and additions and improvements when required, which the Company follows, is shown in the appearance and effectiveness of the property. Our present staff is a competent one, and has able leadership in our General Manager. My observations of the property and its personnel were extremely satisfying.

Government of Honduras Adopts a Decree to Replace Present Concession:

Our present concession expires on December 31st of this year. I am pleased to report that on February 22nd, 1940, we accepted Decree No. 67 applying to the twenty-year period beginning January 1st, 1941 and ending December 31st, 1960.

The essential points of this Decree are as follows:

The Company is guaranteed:

1. Against any increase in the imposts, taxes, duties, services, contributions, or charges of any kind over the rates now established.

2. The free importation of all articles now conceded by the Mining Code, and also of articles which, through progress in the industry, may come to be applicable to mining operations.

3. Against any increase of the direct taxes on capital, road, exportation of metals, annual mining taxes, and consular services.

4. The free exportation of the products of its mines.

5. The Company may establish electric or radiographic communications convenient for its own enterprises, subject to regulations now in force, but only for communications within the Republic unless by special permission of the Government; however, whenever required, the Company must place at the Government's service, according to regulations and tariffs agreed upon, the installations of electric or radiographic communications, as well as aviation fields and transportation stations.

(NOTE: The Company is not the owner of any aviation fields at the present time.)

6. The Company will also be required to maintain a police force at its property, a free hospital, and public schools, as under its present concession.

7. The workmen and employees of the mines, while so engaged, shall be exempt in times of peace from obligatory military service, drills and municipal duties.

8. The Company is granted (without prejudice to third parties) the use of the timber and waters existing, subject to the Law of the Use of National Waters, in its present location and in the zones which the Company may acquire, and in the surrounding territory springs and water-falls which it may use for the development of its works.

9. The Company is exempted from the payment of road toll, and it is specified that the Government will not collect, during the life of this Decree, for the service of cartage and storage upon those materials, such as explosives, cyanide, combustibles and others, which, by their nature, are not conveyed to the warehouses of the State.

The Company will pay to the Government annually, during the life of the Decree, an income tax of seven per cent. (7%) upon its net income (liquid profits) from its present mining property, and a tax of five per cent (5%) for a period of ten years, upon new properties it may acquire and operate. If these new properties should be in operation for a period longer than ten years during the life of the Decree, the tax to be paid is to be agreed upon by the Government and the Company.

The Company is to pay to the Government, on the acceptance of this Decree, the sum of Two Hundred and Fifty Thousand Dollars ($250,000.00) as an advance payment upon the taxes as already set forth, and will not have the right to claim a refund of any unearned part of this advance payment if it suspends operations temporarily or permanently.

The Decree also provides that in case of disagreement between the Government and the Company over the sum of net income (liquid profits) upon which the income tax of seven per cent. is levied on the mining operations of San Juancito, and five per cent. on new mines acquired and operated, said sum shall be taken as the amount which has been accepted by the Government of the United States of America in imposing its income tax upon the net income (liquid profits) of the mining operations of the Company in Honduras.

Under its present concession the Company did not pay to the Government of Honduras any tax upon its income from its mining properties. It did, however, donate without recourse, the moneys necessary to construct a new water supply system for the Capital City of Tegucigalpa, and the neighboring city, Comayaguela; the out-of-pocket cost of this work (performed by the company) was $265,568.55, which would represent a tax upon the Company's net income (liquid profits) from the mine during the twenty (20) years expiring at the end of this year (1940 estimated) of

4%. The difference between this 4% and the tax of 7%, represents the added cost under the new Decree covering the coming twenty years.

Municipal Franchise

The Company has also secured a renewal of its franchise from the Municipality of Tegucigalpa, now known as The Council of the Central District, for the term of twenty (20) years ending December 31st, 1960. There have been three such franchises. The last one, made in 1920, required the payment of 6,000 pesos (now called lempiras) per annum, or the equivalent of Three Thousand Dollars ($3,000.00) United States currency. The compensation to be paid for the new franchise will be at the rate of 8,000 lempiras per annum, equivalent to Four Thousand Dollars ($4,000.00) United States currency; payment for the first ten (10) years to be made in advance, as was the case with the last franchise.

Status of Silver:

You are well aware, from general information published by our newspapers, that during the year 1939 there was a decided downward change in the market price of silver. From January 1st to June 27th, that price was 43 cents an ounce. From the latter date the average price has been approximately 35 cents an ounce, which is the price we are receiving at the present time. It is not possible to predict what Congressional action may take place during the present year, which would restrict or prohibit the continued purchases of "Foreign Silver", which designation covers the product of your property.

If such action should take place, a new world market would be established, taking the place of our own Government, which, for a number of years, has been the *only potential buyer of silver in the entire world.* The result of such a situation in world demand for silver, or possible new price levels, cannot be predicted at the present time.

Neptune Gold Mining Company:

The Annual Report of this Company will be issued in due course this coming Spring, and a copy will be mailed to you. The additions to the power plant and mill, referred to in the report of May 5th, 1939, have been made. As of December 31, 1939, the New York and Honduras Rosario Mining Company held $570,267.57 of the Neptune 5% Debentures, interest on which has been paid to December 31, 1938. We have advanced to Working Capital Account, the sum of $45,000.00, interest at 5% on $30,000.00 of which has been paid to October 6, 1939, and on the balance to November 25, 1939.

Our total investment in this property at the present time is $615,267.27.

General, Financial and Statistical Matters:

For statistical information regarding our operations, we refer you to "Comparative Statement of Operations" for the years 1939 and 1938, page 8.

We have paid in dividends from earnings for the year 1939, $800,559.75, or $4.25 per share, compared with $734,631.30, or $3.90 per share for 1938.

Our Income from Investments and sundry items in 1939 was $95,015.71, compared with $73,344.31 in 1938.

You will notice that the Balance Sheet (pages 10-11) shows a large balance in Bank, $982,255.58. This is due to the fact that when the present European war started, with a material unsettlement of values, we reduced our holdings of securities.

We had marketable securities on December 31, 1939 (See pages 13 and 14) which cost $852,853.17, the market value of which was $695,830.50, a shrinkage of $157,022.67, or $18\frac{41}{100}\%$. On December 31, 1938, these same securities had a market value of $593,867.50, or $30\frac{41}{100}\%$, showing that their value has improved during the year 12%.

There is submitted with this report and made a part hereof:

1. A Comparative Statement of Operations for the years 1939 and 1938;
2. A Comparative Income and Profit and Loss Statement for the years ended December 31, 1939, and December 31, 1938;
3. A Balance Sheet for the year ended December 31, 1939;
4. A Statement of the Surplus Account for the year ended December 31, 1939;
5. A List of the Securities held by this Company December 31, 1939;
6. A Table showing Bullion Production and Dividend Distribution to Stockholders from the organization of the Company, including all the dividends paid from the earnings of the year 1939.

Respectfully submitted,

WM. A. PRENDERGAST,

President

Comparative Statement of Operations

For the Years 1939 and 1938

	Year 1939	Year 1938	Increase Decrease*
Total sales value of Gold and Silver recovered	$2,313,920.24	$2,144,214.86	$169,705.38
Tons of ore milled	178,900	154,500	24,400
Ounces of Silver recovered	4,118,863.77	3,337,965.43	780,898.34
Number of ounces of Silver recovered per ton of ore.	23.02327	$ 21.60495	$ 1.41832
Sales value of Silver recovered	$1,688,249.14	$1,450,063.85	$238,185.29
Average sales value of Silver per ounce	$ .40988	$ .43441	$ .02453*
Average cost of Silver per ounce**	$ .19844	$ .17439	$ .02405
Average profit on Silver per ounce**	$ .21144	$ .26002	$ .04858*
Average sales value of Silver recovered per ton of ore	$ 9.4368	$ 9.3855	$ .0513
Average cost of Silver per ton of ore**	$ 4.5688	$ 3.7677	$ .8011
Average profit on Silver recovered per ton of ore**	$ 4.8680	$ 5.6178	$ .7498 *
Ounces of Gold recovered.	17,876.317	19,832.886	1,956.569 *
Number of ounces of Gold recovered per ton of ore	.09992	.12837	.02845*
Total sales value of Gold recovered	$ 625,671.10	$ 694,151.01	$ 68,479.91 *
Average sales value of Gold per ounce	$ 35.00	$ 35.00	....
Value of Gold recovered per ton of ore	$ 3.4973	$ 4.4929	$ .9956 *
Number of bars in Bullion shipped from mine	2,431	1,973	458

**After giving credit for sales value of Gold recovered.

Income and Profit and Loss Statement

For the Years Ended December 31, 1939, and December 31, 1938

	Year 1939	Year 1938	Increase Decrease*
Production of Gold and Silver	$2,313,920.24	$2,144,214.86	$169,705.38
Less freight and other expenses on bullion	108,469.38	91,110.93	17,358.45
OPERATING INCOME	$2,205,450.86	$2,053,103.93	$152,346.93
Operating expenses	1,246,516.38	1,098,372.85	148,143.53
MINE OPERATING PROFIT	$ 958,934.48	$ 954,731.08	$ 4,203.40
New York administrative and general expenses	88,051.47	86,781.81	1,269.66
NET OPERATING PROFIT	$ 870,883.01	$ 867,949.27	$ 2,933.74
Add income from investments, etc.	95,015.71	73,344.31	21,671.40
	$ 965,898.72	$ 941,293.58	$ 24,605.14
Less other deductions from income (Note A)	32,021.21	46,248.90	14,227.69*
PROFIT BEFORE FEDERAL INCOME TAX AND PROVISION FOR DEPLETION	$ 933,877.51	$ 895,044.68	$ 38,832.83
Federal normal income tax—estimated	90,242.14	96,098.68	5,856.54*
	$ 843,635.37	$ 798,946.00	$ 44,689.37
Appropriated for depletion from earnings (Note B)	10,667.32	2,790.28	7,877.04
NET PROFIT	$ 832,968.05	$ 796,155.72	$ 36,812.33

NOTE A: Other deductions from income include:			
Investigations of outside properties	$ 18,496.20	$ 28,358.46	$ 9,862.26*
Federal capital stock tax, New York State franchise tax and New York City gross receipts tax	10.092.18	11,095.33	1,003.15*
Amortization of premium paid on United States government securities	.....	1,412.49	1,412.49*
Obsolete inventory written off	1,764.56	1,899.24	134.68*
Business association dues, subscriptions and donations	610.00	1,010.00	400.00*
Sundry	1,058.27	2,473.38	1,415.11*
	$ 32,021.21	$ 46,248.90	$ 14,227.69*

NOTE B: Beginning with the year 1932, depletion has been taken in tax returns on a percentage basis in accordance with respective Revenue Acts. Entries recording depletion as they affect the older portion of the property are carried in the general accounts. Depletion deductions on ore mined from the newer discoveries, which newer discoveries are not carried on the books, are made for income tax purposes only.

BALANCE

DECEMBER

ASSETS

Mines, Plant and Equipment			
Mines, real estate and concessions	$3,000,000.00		
Less allowance for depletion of mines	2,211,686.27	$788,313.73	
Buildings, machinery and equipment	$2,198,379.31		
Less allowance for depreciation	1,724,594.16	473,785.15	$1,262,098.88
Current Assets			
Cash		$982,255.58	
Bullion at smelters and in transit—less allowance for expenses		305,582.80	
Marketable securities:			
New York State bonds—at cost	$ 20,039.29		
Domestic corporation bonds—at cost	424,773.75		
Domestic corporation stocks—at cost	408,040.13		
	$ 852,853.17		
Less reserve to reduce to aggregate quoted market prices	157,022.67		
	$ 695,830.50		
Interest accrued on bonds	3,866.58	699,697.08	
Broken ore in stopes and mill bins—at cost		227,255.39	
Inventories—materials and supplies—at cost		259,590.30	2,474,381.15
Investments and Other Assets			
Neptune Gold Mining Company:			
Ten-year 5% income debenture notes, due March 1, 1948, face value $570,267.57, and 5,100 shares of its capital stock of no par value—(at cost)	$ 570,267.57		
Advances to its working capital account	45,000.00	$615,267.57	
Sundry accounts receivable		2,752.87	618,020.44
Deferred Charges			
Inventories of supplies, prepaid insurance, taxes, etc.			124,250.64
			$4,478,751.11

SHEET

31, 1939

LIABILITIES

Current Liabilities

Drafts payable	$ 45,639.14	
Accounts payable	42,683.26	
Accrued taxes	6,768.00	
Provision for federal income tax — estimated	90,242.14	$ 185,332.54

Capital Stock and Surplus

Capital stock (par value $10.00 per share):

Authorized and issued— 200,000 shares	$2,000,000.00		
Less in treasury— 11,633 shares	116,330.00		
Outstanding 188,367 shares		$1,883,670.00	

Surplus:

Earned		$1,864,308.83		
Appreciation of mines	$1,500,000.00			
Less depletion earned	954,560.26	545,439.74	2,409,748.57	4,293,418.57
				$4,478,751.11

Surplus

For the Year Ended December 31, 1939

EARNED SURPLUS

Balance at January 1, 1939		$1,750,420.79

ADDITIONS

Net profit for the year	$832,968.05	
Restoring to earned surplus portion of reserve previously provided to adjust marketable securities to market prices, not required at December 31, 1939, because of increase in quoted prices of securities by this amount during year	81,479.74	914,447.79
		$2,664,868.58

DEDUCTIONS

Dividends paid, totaling $4.25 per share:		
March 25, 1939—$1.00 per share	$188,367.00	
June 30, 1939— 1.00 per share	188,367.00	
September 30, 1939— 1.00 per share	188,367.00	
December 29, 1939— 1.25 per share	235,458.75	800,559.75
Balance at December 31, 1939		$1,864,308.83

SURPLUS FROM APPRECIATION OF MINES

Balance at January 1, 1939	$556,107.06	
Less allowance for depletion on appreciation of mine valuation applicable to 1939 production	10,667.32	
Balance at December 31, 1939		$ 545,439.74
Total surplus at December 31, 1939		$2,409,748.57

Marketable Securities

December 31, 1939

	Par Value	Market Value	
Bonds			
New York State Bonds			
2¾% Emergency Unemployment Relief, due July 1, 1940	$ 10,000.00	$ 10,100.00	
3% General State Improvements, due July 1, 1941	10,000.00	10,375.00	$ 20,475.00
Domestic Railroad Bonds			
Chicago and North Western Railway Co., 1st and Ref. Mtge. 4½% Gold Bonds due May 1, 2037	25,000.00	$ 2,281.25	
The Chicago, Rock Island and Pacific Railway Co., 1st and Ref. Mtge. 4% Gold Bonds due April 1, 1934	50,000.00	2,875.00	
New Orleans, Texas and Mexico Railway Co., 1st Mtge. 5½% Gold Bonds Series "A" due April 1, 1954	25,000.00	9,031.25	
New York, Chicago and St.Louis R.R. Co., Ref. Mtge. Series "C" 4½% due September 1, 1978	50,000.00	28,750.00	
St. Louis-San Francisco Railway Co., Prior Lien Mtge. 5% Series "B" due July 1, 1950	50,000.00	5,750.00	48,687.50
Domestic Public Utility Bonds			
Birmingham Gas Co., 4½% Sinking Fund Notes due October 1, 1944	25,000.00	$ 24,250.00	
Brooklyn Manhattan Transit Corp., Rapid Transit Collateral Trust Bonds 4½% due May 1, 1966	50,000.00	42,625.00	
Electric Power and Light Corp., 5% Gold Debentures due February 1, 2030	50,000.00	40,000.00	
Joplin Water Works Co., 1st Mtge. 5% Gold Bonds, Series "A" due March 1, 1957	25,000.00	26,375.00	
Mississippi Power and Light Co., 1st Mtge. 5% Gold Bonds due December 1, 1957	50,000.00	51,750.00	
National Power and Light Co., 5% Gold Debentures, Series "B" due May 1, 2030	$ 50,000.00	$ 53,500.00	$238,500.00
			$307,662.50

Marketable Securities—Continued

	Par Value	Market Value	
Miscellaneous			307,662.50
New York World's Fair 1939 Incorporated 4% Debentures, due January 1, 1941	4,475.00	$ 975.00	975.00

Stocks	Number of Shares		
Public Utilities Preferred			
Arkansas Power and Light Co., $6.00 cumulative preferred stock, no par	500	$ 43,625.00	
Commonwealth and Southern Corp., $6.00 cumulative preferred stock, no par	550	38,500.00	
Florida Power and Light Co., $7.00 cumulative preferred stock, no par	500	48,250.00	
Jersey Central Power and Light Co., 5½% cumulative preferred stock, par value $100.00 per share	500	44,000.00	
Public Service Co. of Indiana, $7.00 cumulative prior preferred stock, no par	500	45,250.00	219,625.00
Common Stocks, Etc.			
American Chicle Co., common stock, no par	1,000	$129,000.00	
American Gas and Power Co., common stock, par value $1.00 per share	800	1,600.00	
American Gas and Power Co., warrants for subscription to common stock	400	100.00	
Home Insurance Co., capital stock, par value $5.00 per share	621	20,493.00	
Iowa Southern Utilities Company of Delaware, common stock, par value $15.00 per share	2,100	7,875.00	
Dividend arrears certificate on 500 shares of 7% cumulative preferred stock		8,500.00	167,568.00
Total market value at December 31, 1939			$695,830.50

Other Investments (at cost)

Neptune Gold Mining Company, ten-year 5% income debenture notes, due March 1, 1948, face value $570,267.57, and 5,100 shares of its capital stock of no par value	$570,267.57

Report of Auditors

New York and Honduras Rosario Mining Company:

We have examined the balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY as at December 31, 1939, and the statements of income and surplus for the year then ended, have reviewed the system of internal control and accounting procedures of the Company in New York and at the mine office in Honduras, including minutes of stockholders' and directors' meetings, and have examined or tested accounting records of the Company and other supporting evidence, by methods and to the extent we deemed appropriate.

Cash, securities and bullion were verified by actual count, inspection of documents and by direct communication with custodian or depositaries. Provision for depletion and depreciation charged to income, as in the past, represents the maximum amount allowable under federal revenue acts applicable to properties carried on the books.

In our opinion, the accompanying balance sheet and related statements of income and surplus present fairly the position of the Company at December 31, 1939, and the results of its operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST.

New York, N. Y.
February 17, 1940.

Table Showing

Bullion Production

1882	$2,452.27
1883	12,900.42
1884	149,741.39
1885	244,444.70
1886	224,157.58
1887	613,446.05
1888	767,632.15
1889	590,189.55
1890	113.28
1891	369,587.19
1892	614,498.67
1893	492,534.87
1894	392,485.92
1895	158,164.42
1896	449,525.88
1897	568,872.06
1898	611,467.76
1899	798,994.77
1900	827,443.12
1901	780,760.18
1902	490,273.34
1903	436,818.29
1904	721,374.87
1905	993,065.39
1906	1,112,171.69
1907	791,347.62
1908	788,910.23
1909—10 months	636,500.00
1910	890,700.00
1911	887,169.59
1912	944,212.67
1912-13—12 months	1,051,273.28
1913—last 3 months	328,100.05
1914	1,239,877.13
1915	1,191,760.70
1916	1,553,114.86
1917	1,674,193.80
1918	1,803,751.79
1919	2,115,158.25
1920	1,568,612.32
1921	466,956.02
1922	1,066,732.57
1923	1,421,911.15
1924	1,584,610.32
1925	1,763,023.16
1926	1,601,429.35
1927	1,341,300.06
1928	1,500,233.98
1929	1,477,710.79
1930	1,315,821.38
1931	1,403,104.20
1932	1,355,117.43
1933	1,910,740.17
1934	1,965,520.68
1935	2,109,313.47
1936	2,037,208.11
1937	2,203,125.13
1938	2,144,214.86
1939	2,313,920.24
	$60,869,791.17

Distribution to Stockholders

1887	No. 1	$ 37,500— 2½%	($ .25 per share) Dividend
1888	Nos. 2 to 8	112,500— 7½%	(.75 per share) Dividend
1889	Nos. 9 to 14	97,500— 6½%	(.65 per share) Dividend
1891	Nos. 15 to 17	45,000— 3%	(.30 per share) Dividend
1892	Nos. 18 to 22	187,500—12½%	(1.25 per share) Dividend
1893	Nos. 23 to 26	150,000—10%	(1.00 per share) Dividend
1896	Nos. 27 to 30	60,000— 4%	(.40 per share) Dividend
1897	Nos. 31 to 42	180,000—12%	(1.20 per share) Dividend
1898	Nos. 43 to 50	120,000— 8%	(.80 per share) Dividend
1899	Nos. 51 to 63	195,000—13%	(1.30 per share) Dividend
1900	Nos. 64 to 78	255,000—17%	(1.70 per share) Dividend
1901	Nos. 79 to 95	255,000—17%	(1.70 per share) Dividend
1902	Nos. 96 to 100	75,000— 5%	(.50 per share) Dividend
1903	No. 101	15,000— 1%	(.10 per share) Dividend
1904	Nos. 102 to 110	135,000— 9%	(.90 per share) Dividend
1905	Nos. 111 to 124	195,000—13%	(1.30 per share) Dividend
1906	Nos. 125 to 142	285,000—19%	(1.90 per share) Dividend
1907	Nos. 143 to 155	195,000—13%	(1.30 per share) Dividend
1908	Nos. 156 to 167	180,000—12%	(1.20 per share) Dividend
1909	Nos. 168 to 175	120,000— 8%	(.80 per share) Dividend
1910	Nos. 176 to 181	120,000— 8%	(.80 per share) Dividend
1911	No. 182	45,000— 3%	(.30 per share) Dividend
1912	Nos. 183 to 184	70,000— 3½%	(.35 per share) Dividend
1913	Nos. 185 to 189	220,000—11%	(1.10 per share) Dividend
1914	Nos. 190 to 194	260,000—13%	(1.30 per share) Dividend
1915	Nos. 195 to 199	280,000—14%	(1.40 per share) Dividend
1916	Nos. 200 to 207	400,000—20%	(2.00 per share) Dividend
1917	Nos. 208 to 212	260,000—13%	(1.30 per share) Dividend
1917	Nos. 1 and 2	140,000— 7%	(.70 per share) Amortization
1918	Nos. 213 to 216	200,000—10%	(1.00 per share) Dividend
1918	Nos. 3 to 6	200,000—10%	(1.00 per share) Amortization
1919	Nos. 217 to 220	200,000—10%	(1.00 per share) Dividend
1919	Nos. 7 to 10	200,000—10%	(1.00 per share) Amortization
1920	Nos. 221 to 226	320,000—16%	(1.60 per share) Dividend
1920	No. 11	40,000— 2%	(.20 per share) Amortization
1922	Nos. 227 to 230	200,000—10%	(1.00 per share) Dividend
1923	Nos. 231 to 235	250,000—12½%	(1.25 per share) Dividend
1924	Nos. 236 to 241	350,000—17½%	(1.75 per share) Dividend
1925	Nos. 242 to 249	400,000—20%	(2.00 per share) Dividend
1926	Nos. 250 to 257	400,000—20%	(2.00 per share) Dividend
1927	Nos. 258 to 265	400,000—20%	(2.00 per share) Dividend
1928	Nos. 266 to 274	450,000—22½%	(2.25 per share) Dividend
1929	Nos. 275 to 283	500,000—25%	(2.50 per share) Dividend
1930	Nos. 284 to 290	371,677—18¾%	(1.87½ per share) Dividend
1931	Nos. 291 to 297	364,159—18¾%	(1.87½ per share) Dividend
1932	Nos. 298 to 303	283,874—15%	(1.50 per share) Dividend
1933	Nos. 304 to 312	659,324—35%	(3.50 per share) Dividend
1934	Nos. 313 to 321	753,468—40%	(4.00 per share) Dividend
1935	Nos. 322 to 330	800,559—42½%	(4.25 per share) Dividend
1936	Nos. 331 to 337	734,632—39%	(3.90 per share) Dividend
1937	Nos. 338 to 341	833,525—44¼%	(4.425 per share) Dividend
1938	Nos. 342 to 345	734,631 —39%	($3.90 per share) Dividend
1939	Nos. 346 to 349	800,560—42½%	(4.25 per share) Dividend
		$15,136,410	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 284, inclusive, were paid on Capital Stock of 2,000,000.00
Amortization Distributions, Nos. 1 to 11, inclusive, were paid on Capital Stock of..... 2,000,000.00
Dividends 285 to 349, inclusive, were paid on outstanding capital stock.

January 1, 1940.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

The following report on your mining operations in Honduras during the year 1939 is herewith submitted for your consideration.

Production

	1939	1938
Dry Tons Treated	178,900	154,500
Average per ton—Troy ounces silver milled	25.4986	23.9905
Average per ton—Troy ounces gold milled	.10808	.1401
Total Troy ounces silver milled	4,561,705	3,706,540
Total Troy ounces gold milled	19,336	21,648
Total Troy ounces silver produced	4,118,887	3,335,067
Total Troy ounces gold produced	17,800	19,916
Average per ton—Troy ounces silver produced	23.0234	21.5862
Average per ton—Troy ounces gold produced	.09994	.1289
Ratio of Gold to Silver	1:230	1:167
Bars of Doré Bullion	2,431	1,973
Bullion Fineness of Silver	960.736	951.160
Bullion Fineness of Gold	4.171	5.680
Custom Ore & Au. Bullion—Not included above:		
Troy ounces silver	.....	2.570
Troy ounces gold	8,843	22.955

The record tonnage milled and the consequent record silver production, resulting in most satisfactory earnings, must be largely attributed to the additional power made available by the installation of the Diesel power units mentioned in last year's report.

The policy, which worked out so satisfactorily, of mining as heavily as practicable from purely silver veins, in anticipation of a possible drop in the price of silver, resulted in relatively low gold production.

At the present price of silver, it is proposed to balance gold and silver production according to the actual proportion in our reserves, as no advantage is indicated in favoring the production of one over the other.

Considerably lower silver and somewhat higher gold production may be forecast for 1940.

Honduras Operating Costs in U. S. Currency

	YEAR 1939	Total Costs	YEAR 1938	Total Costs	Cost Per Ton 1939	Cost Per Ton 1938	Cost Per Ounce of Silver 1939	Cost Per Ounce of Silver 1938
MINING								
Labor	$377,274.09		$341,077.21					
Supplies	254,654.96		235,809.22					
Power	10,915.23		4,496.68					
Depreciation	9,033.04		8,920.31					
ORE MINED AND MILLED								
First of Year	$248,294.13		$242,411.02					
Last of Year	227,255.39	21,038.74	$ 672,916.06	248,294.13	Cr. 5,883.11	$584,420.31	$3.76	$3.78	$.1634	$.1751
MILLING								
Labor	$ 76,627.45		$ 74,436.26					
Supplies	231,502.97		197,371.00					
Power	26,346.11		11,221.77					
Depreciation	42,786.14	377,262.67	39,913.72	322,942.75	2.11	2.09	.0916	.0967
ADMINISTRATION								
Labor	$146,345.26		$143,985.58					
Supplies	35,498.40		33,651.49					
Depreciation	14,493.99	196,337.65	13,372.72	191,009.79	1.10	1.24	.0476	.0572
		$1,246,516.38		$1,098,372.85	$6.97	$7.11	$.3026	$.3290
Credit for Gold		625,671.10		694,151.01	3.50	4.49	.1519	.2079
Net Cost of Silver		$ 620,845.28		$ 404,221.84	$3.47	$2.62	$.1507	$.1211

Honduras Operating Costs

Although total operating costs are naturally high on account of the large tonnage mined and milled, the cost per ton shows a decrease of 14 cents from the previous year, notwithstanding that the use of Diesel power increased power per ton cost 11 cents.

Number of Men Employed

During the year 1939, there were employed between 900 and 1000 men per day.

THE MINE

Ore Reserves

Please refer to Annex "A" for the detail of the 1939 ore reserves summarized below:

Comparative Summary—Active Ore Reserves

Based on silver at 35 cents and gold at $35.00 per Troy oz.

	Tons of Ore Plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1940	759,654	24.32	.163	18,477,899	123,832
January 1, 1939	720,051	26.75	.1769	19.262,102	127,398
Increase	39,603				
Decrease		2.43	.0139	784,203	3,566

Comparative Summary—Inactive Ore Reserves

	Tons of Ore Plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1940	20,154	11.00	.07	225,319	1,326
January 1. 1939	20,154	11.00	.07	225,319	1,326

The Southwest veins, of which there are now four partially developed, contributed largely to the new reserves. Jucuara No. 2 was a substantial contributor, and in a lesser way, the Termopilas.

Notwithstanding the depletion of 4,561,705 ounces of silver, sufficient new ore was developed to maintain total silver reserves only 784,203 ounces less than last year. Newly developed ore was relatively low-grade. Consequently, although the reserve has increased by practically 40,000 tons, the ounces per ton in both silver and gold are slightly lower.

The heaviest exploration program in the property's history failed to disclose any new veins of great importance.

Ore Production

Annex "D", showing detail of ore production, is summarized below, and comparison made with former years.

	1939	1938	1937	1936	
From Stoping	147,281	120,094	122,669	121,996	tons
From Development	31,567	34,407	39,679	44,802	"
Total	178,848	154.501	162,348	166,798	"

Ore from development was only 17.66% of the total, or a decrease of 4.64% from a year ago, due to the absence of extensive new veins.

The outlook for development ore during 1940 is not encouraging.

Exploration and Operating Connections

Summary of Annex "C"

Year	Drifts	Crosscuts	Raises	Winzes	Total Ft.
1939	12,387	15,080	10,830	..	38,297
1938	11,690	11,323	8,100	..	31,113
Increase	697	3,757	2,730	..	7,184

	1939	1938	1937	1936
Development Feet Driven	38,297	31,113	32,137	29,523

Equally heavy exploration is planned for this year and will be detailed later in this report.

Operating Crosscuts and Raises Below the Peña Blanca Level

An important feature during 1939 was the development of considerable ore between the Lower 300 and Upper 150 levels of the old Southwest Vein. To avoid unduly heavy tramming costs ore and waste passes were completed from the Lower 650 level to the Upper 150 or Peña Blanca level for more ready disposal of ore and waste from this Southwest section. A shaft raise for the movement of material is also of vital importance and a raise was driven from the Lower 400 level to the Upper 150 level. Timbering, together with the cutting of shaft stations, is being expedited, and this material-handling raise, Shaft Raise No. 4, should be in operation early in 1940.

All the operating crosscuts, from the various Southwest levels to the transport raises, have been completed.

It was mentioned in last year's report that it was proposed to draw as heavily as possible during 1939 from low gold-bearing veins and for this reason work was discontinued on shaft raise No. 3 in the Santa Fe section. Toward the end of 1939 work was renewed and it will be in operation late in January, 1940.

Operating Crosscuts and Raises
Above the Upper 150 ft. level

Shaft raise No. 5, the material-handling raise for the Jucuara No. 1 Fortuna vein above the Peña Blanca level, was completed early in the year and has been in full operation since that time. Connected, as it is, to the surface, it provides excellent ventilation and ready access to timber for the upper levels of Jucuara No. 1.

Exploration Crosscuts and Raises
Below the Upper 150 ft. Level
Zero Fortuna-Salvador

This exploration crosscut, commenced from the south end of the Fortuna vein in Block 72, was driven 296 feet in a southwesterly direction, with the object of cutting the possible upward extension of ore being worked on the Lower 300 Salvador level in Block 73 and also to explore the territory between the Salvador and Independencia veins. At 110 feet a strong vein was cut, but approximately 180 feet of drifting has proved that ore of commercial value may not be expected over this distance. At 230 feet a second vein was encountered and the small amount of development executed indicates ore of good grade, but the vein being cut late in the year, insufficient work has been carried out to define its possibilities. Work on this latter vein and the crosscut is being continued.

Zero Southwest

From the Southwest Main a crosscut was driven due north in Block 72. At 100 feet a branch from the Southwest Main orebody was intersected. Some 110 feet of drifting to the east on this vein before connecting with the Southwest Main vein disclosed ore of above average grade with encouraging gold values. This orebody has been named Southwest No. 4.

Lower 200 Carmen

From the southern extremity of the Lower 200 Carmen in Block 67 a crosscut 287 feet in length was driven in an easterly direction to expose any vein occurrence lying between the Carmen and the Veta No. 4 South. Results to date are discouraging, but further prospecting is warranted and the crosscut is being continued as other more important work permits.

Lower 200 Jucuara No. 2

From the west portion of the Lower 200 Jucuara No. 2 in Block 91 a crosscut northeast was advanced a distance of 201 feet. Although not advancing at present it will be driven this year to the possible downward extension of a vein cut in 1934 by the U. 150 West Crosscut Branch, a vein which at that level is too low grade to mine.

Lower 200 Esperanza-Jutiapa

With the object of exploring this new and virgin territory a crosscut from the Esperanza Raise in Block 108 was started and driven in a southeasterly direction for a distance of 502 feet. Al-

though results have been disappointing, the possibility of ore occurrence, due to the formation being disclosed, is considered favorable and it is proposed to continue the crosscut at least 2,500 feet, from which point the entire southern territory of the property can be explored if the formation and general indications are encouraging.

Lower 300 Rosario

As indicated under the general exploration plan in last year's report, two crosscuts were commenced in Block 22 from the Lower 300 Rosario vein. The crosscut northwest was driven 865 feet, disclosing numerous stringers of little value. The crosscut is being continued further to explore this area between the Rosario and Colonia veins.

The crosscut also in Block 22 was driven southerly 772 feet. At 540 feet from the main Rosario vein a fissure was intersected carrying sufficient value to warrant development, and some 130 feet of drifting was carried out, but with discouraging results. Further work on the crosscut is contemplated.

From the Lower 300 Rosario in Block 43 a crosscut was advanced 271 feet in a southwest direction for the purpose of cutting the possible downward continuity of the Culebra vein. At 230 feet a narrow vein was exposed of above average gold value, but 44 feet of drifting shows values to be inconsistent. The crosscut and drifting on the vein is being continued.

Lower 300 San Joaquin

A crosscut north from the Lower 300 San Joaquin vein to explore at depth the San Vicente vein and other nearby surface prospects was commenced in Block 63 and advanced 858 feet. Nothing of importance in the course of this advance has been exposed, but it is proposed to turn the crosscut northwest to parallel the old Upper 150 Crucero crosscut and thus explore the virgin ground north of the Crucero gulch.

Lower 300 Salvador

In Block 73, from the Salvador vein, a crosscut bearing southwest was driven 141 feet with the intention of exposing the Salvador branch intersected and developed on the Lower 400 level midway between the Salvador and Independencia. Failure to find the apparently faulted vein on the Lower 300 makes it advisable to develop it further by raising from the Lower 400 level, thereby also getting ventilation for stoping operations already in preparation on the Lower 400 level.

Lower 300 Southwest

On driving this crosscut, commenced from the Southwest vein in Block 72, a further 340 feet, nothing of value was exposed. The San Joaquin vein having been cut by this crosscut it was connected late in the year to the old Lower 300 San Joaquin level by means of a raise, as was stated in previous reports.

Lower 300 Jucuara No. 1

The crosscut northeast from Jucuara No. 1 vein in Block 74, commenced in 1937 to prove up the section between the Jucuara

No. 1 vein and the northern extension of the main Carmen vein, was advanced 188 feet during the year, with disappointing results. Some 150 feet are still to be explored in this territory before intersecting the probable northern extension of the Carmen vein.

Lower 300 Jucuara No. 2

210 feet of crosscutting due north in Block 98 from the western faulted extremity of the Lower 300 Jucuara No. 2 was completed during the year to determine the possibility of picking up the Jucuara No. 2 vein beyond the fault. Nothing having been discovered, the crosscut was stopped. It is planned to drive westward along the general strike of Jucuara No. 2 vein several hundred feet and from there do additional crosscutting.

Lower 400 Salvador-Independencia

From the Lower 400 Salvador vein a crosscut from Block 72 was driven 438 feet in a southwesterly direction to ascertain if the Independencia extended to this horizon and also to explore the intervening territory. At approximately 130 feet from the Salvador vein a strong but shattered quartz vein was cut. Development on this vein amounted to 200 feet of drifting and about 150 feet of raising. Moderate grade ore has been exposed from which a small tonnage may be expected from the stoping operations now being outlined.

At 200 feet from the Salvador another narrow vein was intersected on which some 270 feet of drifting and raising was accomplished, exposing ore of low grade. More development on this vein is necessary before abandoning it. The crosscut was carried beyond the point where the continuity downward of the Independencia Branch vein might be expected. It was not found, and the crosscut was stopped.

Lower 400 Jucuara No. 2

Commencing in Block 91 from the fault that cuts off the Jucuara No. 2 vein, a crosscut was driven north 320 feet to determine whether the small high grade orebody found in Block 91 on the Lower 300 level extended to the Lower 400. The crosscut was advanced in ground badly broken and faulted, finally entering sedimentary formation where the crosscut was stopped.

Lower 400 Aguacatal

It was observed in the report of last year that the prospect of striking ore bodies in this crosscut—advanced 640 feet during 1939 in a southeasterly direction—was discouraging. As the crosscut is at present being driven in shale the probability for ore occurrence is considerably lessened, but to complete the prospecting of this country the crosscut has now been turned due south in an effort to get through the shale formation. Should the shale persist for a further 500 feet the crosscut will be terminated.

Lower 400 Sante Fe No. 3

In Block 85 from the Lower 400 Santa Fe No. 3, a crosscut, bearing northeast, was driven for the purpose of cutting any downward extension of known ore on the Lower 350 San Benito. The

non-existence of this ore at the Lower 400 elevation decided the termination of this crosscut at a distance of 136 feet.

Lower 500 Jucuara No. 2

From Block 99 on the Lower 500 Jucuara No. 2 a crosscut was driven 213 feet in a northerly direction for the same purpose as explained under the crosscut driven from Block 98 on the Lower 300 Jucuara No. 2. This crosscut is being continued.

Exploration Crosscuts

Above the Upper 150ft. Level

Upper 450 Jucuara No. 1

The exploration crosscut mentioned in the report of last year as commencing in Block 79, was advanced due north a distance of 147 feet. The crosscut entering extremely shattered, faulted and loose ground, was stopped.

In Block 73, also on the Upper 450 level, 505 feet of crosscutting in a direction northeast was accomplished. Numerous low grade stringers were disclosed and the crosscut will be continued towards the Catalina vein to prove the territory between the Jucuara No. 1 vein and the Catalina.

Upper 450 Porvenir-Culebra

The crosscut east from the Upper 450 Porvenir vein to explore the territory west of the Culebra was started in Block 61 and advanced 128 feet. Some 800 feet still remain to prove the territory intervening between the Porvenir and Culebra veins.

Upper 450 San Blas-Salvador

A crosscut northeast from the eastern end of the San Blas vein in Block 77 on the Upper 450 was driven some 170 feet to the Salvador vein. Nothing of importance being revealed the crosscut was stopped on breaking into an old Salvador stope.

Upper 450 Termopilas

An adit crosscut was driven in a northerly direction on the Upper 450 Termopilas in Block 38 to cut the Termopilas vein proper. The vein was encountered at approximately 135 feet from the portal and some 300 feet of drifting exposed stoping ore over a distance of about 90 feet. The drift will be continued.

Upper 350 San Benito

This crosscut, commenced in Block 82 towards the Independencia, was advanced 91 feet in a northerly direction. It failed to encounter the upper reaches of a slightly developed low grade vein on the Upper 150 level off the Esperanza crosscut and was discontinued.

Also on the Upper 350 San Benito, but from the eastern end of the faulted portion of the vein, a crosscut in Block 83 was driven due south for a distance of 165 feet to determine the upward extension of the Santa Fe vein. Results proving negative, the crosscut was stopped.

Upper 150 Aguacatal

In the report of 1938, it was explained that it was proposed

to continue the crosscut some 500 feet west from the main one. During the year this crosscut was advanced 720 feet, and the formation remaining unfavorable for ore occurrence, all work in this section has been abandoned.

Upper 150 Guadalupe

To explore the area intervening between the San Miguel and Colonia veins, a crosscut, in Block 51, on the Upper 150 Guadalupe vein, was driven 279 feet in a northerly direction over which distance numerous interesting stringers have been disclosed. Further work is contemplated.

Upper 150 Jucuara No. 2

To determine the downward extension of the vein cut on the Upper 450 level in Block 80 a crosscut was started in Block 78 on the Upper 150 level and driven 370 feet in a southwesterly direction. At a distance of 265 feet a narrow, hard stringer was encountered. Development on it, consisting of 257 feet of drifting and raising, proved a vein, carrying good gold values, which warrants further investigation.

Zopilotera Vein

1745 feet of crosscutting passed under and well beyond the expected downward extension of the Zopilotera vein, worked years ago 200 feet higher. Only a gouge fissure exists at the crosscut level, typical of the inconsistency of veins in the sedimentaries which predominate in that region.

All work was stopped at the end of the year.

The rather extensive exploration work that has been done during the past two years at Santa Lucia, Santa Elena, Aurora and Zopilotera, with negative results, disposes of that district as unworthy of further expense.

General Exploration Plan
for the year 1940

Exploration crosscuts proposed for the year 1940 do not change materially from the program of the previous year and may be summarized as follows:

1. Crosscut northwest from the Lower 300 San Joaquin vein, parallel to the old Upper 150 Crucero crosscut, to explore the virgin ground north of the Crucero gulch.
2. Continuation of the two crosscuts from the Lower 300 Rosario vein commenced in Block 22.
3. Completion of crosscut southwest from the Lower 300 Rosario vein commenced in Block 43 to explore the Culebra and Esperanza vein country.
4. To advance the crosscut east from the Upper 450 Porvenir vein to explore the territory west of the Culebra vein.
5. Continuation of Crosscut 11 in Block 91 from the Lower 200 Jucuara No. 2 as explained under this heading in the report of last year.
6. Active driving of the crosscut northeast on the Upper 450 ft. level towards the Catalina vein.

7. A crosscut southeast from the eastern end of the Upper 150 San Benito vein in Block 78 to explore the territory between the San Benito and the old Upper 150 Salvador crosscut south. Should conditions permit a crosscut will also be started in a direction southwest from the present end of the Upper 150 Esperanza crosscut in Block 89 for the purpose of exploring the area towards La Tigra Creek.

VEIN DEVELOPMENT AND STOPING

Veins Worked in 1939

Of the 26 veins, from which ore in 1939 was derived, the Jucuara Nos. 1 and 2, Salvador, Southwest No. 1, Carmen, Santa Fe No. 1, and the San Blas veins yielded 84%. The remaining 16% was contributed by the Independencia, Jucuara Nos. 3 and 4, San Benito Nos. 1 and 2, Santa Fe Main, Santa Fe Nos. 2 and 3, San Joaquin, Capitana, Santa Gertrudis, Southwest Nos. 2, 3 and 4, Veta 4 North and South, Termopilas, Colonia and Rosario veins.

Salvador Group

Salvador Vein

Of the 19,639 tons of ore extracted from the Salvador vein and branches, 17,602 tons came from stopes. Further development is in progress on the Salvador branches, but it is not expected that the unbroken reserve of 29,143 tons of average grade will be materially increased.

Jucuara No. 1—Fortuna Vein

In view of the early 1939 plan to draw as heavily as possible from low gold-bearing veins, operations were concentrated on the Jucuara No. 1 vein, thus making it again the greatest single producer for the year. Of the total tonnage mined from all sources 41½ percent came from this vein, 71,009 tons from stopes, and 3,006 from development. An unbroken reserve of 130,478 tons still remains, showing a value of 27 ozs. silver and .06 gold per ton. Any great increase cannot be expected as the field for development is now limited.

Carmen Vein

This vein was worked consistently but on a small scale during the year, yielding 10,635 tons, of which 9,195 tons came from stopes. An unbroken reserve of fair grade ore of 21,977 tons still exists. Results of development on the Lower 300 level proved disappointing. The failure to expose ore at this horizon supports the belief that the field for development in the Carmen district is now limited.

Independencia Group

Independencia Vein

The exposure of a small ore body below the Upper 150 level on this vein, caused a slight increase in the blocked out reserve, which is now shown at 9,763 tons of moderate grade. Tonnage mined during the year amounted to 2,253 of which 645 came from development. Stoping during 1940 will be about the same as that of the year 1939.

San Blas No. 2 Vein

Development by drift and raises amounted to 1,174 feet, total production to 4,703 tons, stopes contributing 3,445 tons. An unbroken reserve of 17,000 odd tons is shown and although of even lower grade than last year, it is still retained in the active ore list because of the favorable vein formation and its accessibility.

Santa Fe Group

San Benito No. 1 Vein

Disclosure of ore in raises between the Lower 400 and Lower 300 levels allowed a slight increase in the blocked out reserve. Tonnage produced amounted to 3,191, the bulk of this coming from stopes.

San Benito No. 2 Vein

The extraction of 1,908 tons from stopes together with 482 tons from development leaves this vein with an unbroken reserve of 24,552 tons averaging 29 ozs. silver and .33 oz. gold per ton. Stopes are already being prepared to draw somewhat heavier from this vein during the coming year

Santa Fe No. 1 Vein

Production amounted to 6,269 tons of which 34 percent was obtained from development. With the active driving on the Lower 650 level and raising therefrom, the limits of this ore body are now almost defined and it is not expected that the unbroken reserve of 46,453 tons will show any increase.

Santa Fe No. 2 Vein

The extraction of 3,534 tons, all of which came from stopes with the exception of 23 tons, did not appreciably affect the unbroken reserve of 60,449 tons of excellent ore. As the policy of balanced mining now becomes necessary, stoping operations in the Santa Fe No. 2 vein will be increased.

Santa Fe No. 3 Vein

The 2,424 tons produced all came from stoping, leaving a reserve of good grade ore amounting to 14,391 tons. Stopes are in preparation to draw heavier on this vein.

Jucuara Group

Jucuara No. 2 Vein

Intensive development on the Lower 300 and Lower 400 levels beyond the previously known western limits of this vein exposed ore of good grade, which permitted an increase in the blocked out reserve of some 11,800 tons, bringing the total to 151,043 tons. The increased tonnage is somewhat lower grade, 22 ozs. silver and .26 oz. gold per tone as against 26 ozs. silver and .30 oz. gold per ton of the previous year. Again the Jucuara No. 2 vein was the second largest producer of the year with 19,584 tons from stopes and 3,385 tons from development, or a total of 22,969 tons.

Mention was made in the 1938 report of the discovery of the probable upward extension of the Jucuara No. 2 vein on the

Upper 450 level. About 1,000 feet of drifting and raising at this elevation proves a not too well defined vein carrying, however, sufficiently good gold values, which though not permitting any addition to the active ore list, may be further exploited by stoping on a small scale.

Jucuara No. 3 Vein

The blocked out reserve on the vein is the same as that of 1938, the small tonnage of 1,620 tons extracted, apart from 87 tons, being from broken ore in stopes, as the vein was not worked during 1939.

Jucuara No. 4 Vein

A small tonnage of 2,546, all from stopes, was extracted, leaving an unbroken reserve of 19,118 tons. Further prospecting is contemplated from the Lower 400 horizon to expose known ore below the Lower 300 level.

Jucuara No. 5 Vein

This was not included in the work of 1939 and the small reserve in it remains the same as for 1938.

Old Mine Group

Capitana Vein

The small tonnage of 347 tons was drawn from broken ore in stopes reserve, leaving the blocked out reserve unchanged.

San Joaquin Vein

1,217 tons of good grade gold ore were extracted of which 1,186 tons came from stopes. The recovery of old raises from the Lower 300 to the Zero levels gave access to a block of ore below the Zero, thus increasing the blocked out reserve to 3,538 tons, showing 19 ozs. silver and .28 oz. gold per ton.

Southwest No. 1

It may be noted, in the report of last year, that the probability of developing new ore on this vein was considered excellent, and by an intensive development program the forecast was fully borne out by the increase from 338,875 ozs. silver and 1,108 ozs. gold to 1,116,545 ozs. silver and 5,843 ozs. gold, included under the active reserve at a value of 23 ozs. silver and .12 oz. gold per ton. Gold values are outstanding between the Lower 300 and Lower 200 levels. The lateral extent of the vein to the southwest has not been thoroughly explored, but beyond the Santa Gertrudis junction much ore can hardly be expected, judging from the work done in that direction. Further development remains to be done to the northeast, and particularly on the Lower 400 level to prove the extension of values to that level. Of a total production of 12,401 tons extracted, development alone yielded 10,429 tons. Heavier stoping operations are being considered for the year 1940. Development was retarded somewhat due to the loose and oxidized vein requiring close timbering; but the actual mining of this vein should be achieved at a low cost per ton.

Southwest Vein No. 2

Development on the Lower 300 level during the last half of the year proves this to be parallel and lying some 80 feet to the north of the Southwest No. 1 vein. Drifting and raising proves a crushed vein structure varying from six inches to five feet in width, carrying erratic gold values. Development completed during the year permits the inclusion of 17,326 tons of ore of average grade in the active reserve. The small tonnage of 783 was derived from development operations. Drifting and raising is under way fully to exploit the possibilities of this new ore body.

Southwest Vein No. 3

This small ore body is located some 30 feet southeast and roughly parallel to the Southwest vein No. 1. Between the Zero and Upper 150 levels it joins the Southwest vein No. 1 and has not yet been exposed on the Lower 300 level. Development accomplished on the Lower 200 and Zero levels allowed a reserve to be blocked out containing 14,459 tons of fair grade. From development sources, 1,622 tons were realized.

Southwest Vein No. 4

This proves to be a branch vein of the Southwest No. 1 extending from the Upper 150 to the Lower 200 level. Further development is required to prove its full extent, but it is not expected that additions will be made to the blocked out reserve of 9,700 tons of 27 ozs. silver and .11 oz. gold per ton as shown on the active ore list.

Southwest Veins—General

Results of active development in the Southwest country during the year may be viewed with satisfaction. The exposure of ore on the Lower 300, Lower 200 and Zero levels now enables the important figures of 1,861,341 ounces silver and 8,896 ounces gold to be included under the Southwest Group, thus partially offsetting ounces extracted from other veins and further extending the life of the mine. A considerable area to the northeast still remains to be explored, but present indications of work in progress in this section are not so encouraging as heretofore.

Termopilas Vein

The upper reaches of this vein were explored from the surface during the dry season. Although it will not be a great producer, an interesting feature is the good gold values encountered during exploration. Work on the vein consisted of 766 feet of drifting on the Upper 450 and Upper 550 levels and 391 feet of raising, which has resulted in 3,582 tons of .20 oz. per ton gold ore being blocked out. Development will be actively pursued during the coming year. Ore realized amounted to 640 tons, all from development.

Miscellaneous Group

Veta No. 4 South

The actual result of 496 feet of drifting and 404 feet of raising, although permitting an addition to the blocked out re-

serve tonnage, was on the whole, disappointing. Values exposed on the Upper 550 horizon were not consistent, but further work is contemplated above this level to explore the upper reaches of this vein. 1,149 tons were extracted, 340 tons of this being from stoping.

Santa Gertrudis No. 1 Vein

A further 190 feet of drifting on the Lower 200 level exposed ore of fair grade, allowing an addition of some 4,000 tons to the blocked out reserve. This ore has now been encountered at the Lower 300 level and will be followed as long as values exist. 940 tons from development were produced.

Other Veins

A small tonnage amounting to 1,021 was derived from the Santa Fe Main, Veta No. 4 North, Colonia and Rosario veins, together with 1,094 tons from old fills.

THE MILL

Tonnage Crushed

	1939	1938
Total Wet Tons received	196,075.43	168,800.12
Average per cent of moisture	8.7861	8.4704
Total Dry Tons milled	178,900	154,500
Average Tons milled per day (365 days)	490	423
Average Tons milled per day full running time	511	485
Total Tons treated by Mill to December 31, 1939	3,317,108	3,138,208

Recovery

	1939	1938
Average ounces silver received per ton	25.4986	23.9905
Total ounces silver received	4,561,705	3,706,540
Average ounces silver recovered per ton	23.0234	21.5862
Total ounces silver recovered	4,118,887	3,335,067
Average silver recovery, per cent	90.2927	89.9779
Average ounces gold received per ton	.10808	.1401
Total ounces gold received	19,336	21,648
Average ounces gold recovered per ton	.09994	.1289
Total ounces gold recovered	17,880	19.916
Average gold recovery, per cent	92.4705	92.0079

Treatment Period Detail

	1939				1938			
			Ag.	Au.			Ag.	Au.
	Hrs.	Min.	%	%	Hrs.	Min.	%	%
Extraction by Crushing Solution	9	00	36.30	75.63	9	00	39.44	76.19
Extraction by Agitation	75	05	54.67	18.18	87	48	50.58	16.56
Extraction in Slime Presses	1	05	1.00	1.15	1	05	1.88	1.61
	85	10	91.97	94.96	97	53	91.90	94.36
Less Dissolved Value Loss			1.68	2.49			1.92	2.36
Recovery			90.29	92.47			89.88	92.00
Per Cent sand not passing 150 mesh			23.41				28.03	

Comparative Statement

On Consumption of Mill Supplies

	1939					1938				
	Amount Consumed	Total Cost U. S. Cy.	Cost Per Unit	Cost Per Ton Crushed (Tons) 178.900	Cost Per Fine Oz. Bullion Produced (Ounces) 4,136,767.09	Amount Consumed	Total Cost U. S. Cy.	Cost Per Unit	Cost Per Ton Crushed (Tons) 154,500	Cost Per Fine Oz. Bullion Produced (Ounces) 3,354,982.51
Cyanide (100% KCN)	836,604 lbs.	$101,090.16	$.1208	$.5651	$.0244	702,527 lbs.	$87,561.30	$.1246	$.5667	$.0261
Sulphur	257,500 "	10,516.91	.0408	.0588	.0025	259,545 "	11,251.99	.0434	.0728	.0033
Zinc Dust	146,981 "	17,734.60	.1207	.0991	.0043	123,143 "	15,056.86	.1223	.0975	.0045
Muriatic Acid	14,835 "	2,573.22	.1735	.0144	.0006	10,465 "	1,951.88	.1865	.0126	.0006
72" Filter Canvas	4,445½ yds.	3,197.54	.7193	.0179	.0008	4,386 yds.	3,769.67	.8595	.0244	.0011
Lime	3,235,149 lbs.	23,124.78	.0071	.1293	.0056	3,228,143 lbs.	22,193.59	.0069	.1436	.0066
Powdered Borax	1,400 "	80.97	.0578	.0004	....	.....	.....	....	....	....
Borax Glass	4,300 "	842.45	.1959	.0047	.0002	4,800 "	914.14	.1904	.0059	.0003
Soda	1,120 "	65.01	.0580	.0004	....	784 "	50.16	.0640	.0004	....
Fuel Oil	6,683 gals	1,274.74	.1907	.0071	.0003	6,779 gals.	1,807.26	.2666	.0117	.0005
Steel Balls	291,868 lbs.	13,156.39	.0451	.0735	.0032	112,381 lbs.	5,389.77	.0480	.0349	.0016
Crusher & Battery Liners, Shoes & Dies	37,565 "	3,516.80	.0936	.0196	.0009	38,900 "	3,662.05	.0941	.0237	.0011
Tube Mill and Ball Mill Liners	113,049 "	13,000.16	.1150	.0727	.0032	89,122 "	11,944.24	.1340	.0773	.0036
		$190,173.73		$1.0630	$.0460		$165,552.91		$1.0715	$.0493

POWER

Rainfall	1939	1938
Total rainfall, inches	40.89	54.87
Number of rainy days	177	203
Greatest monthly rainfall, inches	8.09 (Sept.)	12.24 (Oct.)
Lowest monthly rainfall, inches	.10 (April)	.08 (March)
Greatest single rainfall, inches	1.77 (Sept.)	2.52 (Oct.)

POWER DISTRIBUTION

	1939		1938	
	Kilowatt Hours	K.W. Hrs. Per Ton	Kilowatt Hours	K.W. Hrs. Per Ton
Mine Power	2,395,460	13.390	2,030,348	13.141
Electric Haulage	181,190	1.013	192,260	1.244
Blacksmithing	36,400	.204	19,740	.128
Mine Lights	61,370	.344	61,403	.397
Hoisting	23.070	.129	20,727	.134
Ventilation	.....	...	14,741	.095
Mill Power	5,896,490	32.960	5,572,759	36.070
Mill Lights	63,240	.353	59,598	.386
Surface Lights	528,716	2.955	525,478	3.401
Surface Power	33,424	.187	25,611	.166
Machine Shop	93,830	.524	101,425	.657
Laboratory	24,100	.135	17,900	.116
Totals	9,337,490	52.194	8,641,990	55.935

Power Production by:	1939		1938	
	K.W. Hrs.	Per Cent	K.W. Hrs.	Per Cent
San Juancito Plant	4,294,460	45.99	4,234,600	49.00
Guadalupe Plant	2,909,630	31.16	3,478,290	40.25
Aguacatal Plant	903,900	9.68	929,100	10.75
Diesel Plant	1,229,500	13.17	.....	....
Total	9,337,490	100.00	8,641,990	100.00

COST OF POWER PRODUCTION

1939

	Hydro		*Diesel*		*Total*	
	Amount U.S. Cy.	Cost per K.W. Hr.	Amount U.S. Cy.	Cost per K.W. Hr.	Amount U.S. Cy.	Cost per K.W. Hr.
Labor	$11,514.49	.0014201	$ 2,534.74	.0020616	$14,049.23	.0015046
Supplies	5,422.98	.0006689	20,698.13	.0168346	26,121.11	.0027974
Total	$16,937.47	.0020890	$23,232.87	.0188962	$40,170.34	.0043020

	1939			1938		
	Amount U.S. Cy.	Per Ton	Per K.W. Hr.	Amount U.S. Cy.	Per Ton	Per K.W. Hr.
Labor	$14,049.23	.07853	.0015046	$12,269.21	.07941	.0014197
Supplies	26,121.11	.14601	.0027974	4,775.61	.03091	.0005526
Total	$40,170.34	.22454	.0043020	$17,044.82	.11032	.0019723

Based on Horsepower Generated:	1939	1938
Horsepower Hours	12,316,743	11,584,437
Cost per Horsepower Hour	$ 0.003209	$ 0.001471
Cost per Horsepower Year	28.11084	12.88596
Cost per Horsepower Year—Increase	15.22488	.87600

Only two years, 1914 and 1930, equalled 1939 in lack of rainfall. It was extremely fortunate that the new Diesel power units were ready for operation at the beginning of last dry season. Without them it is doubtful if more than 120,000 tons could have been treated. The installation can well be considered already reimbursed.

The operation of the Diesel plant has been entirely satisfactory; but attention is drawn to the comparative table above showing the cost per kilowatt hour, $.0188, as against $.0021 for the hydro-electric plants.

In order to increase the efficiency of the San Juancito Power Plant it is planned to replace the present 30-year old penstock with a new and larger pipe line capable of supplying water for 1,900 horse power. Consideration is also being given to the advisability of installing an additional hydro-electric unit to take advantage of the increased penstock capacity.

EXPANSION

Development on the Santa Lucia Mine, mentioned last year, was unfavorable, and the option was relinquished last April after spending $9,867.66 in addition to that expended during 1938.

Late in the year an option was taken on a gold property near Santa Rosa de Copan, Honduras. The prospect is known as the San Andres Mine and was partially developed by previous option holders. The ore is low grade, but an effort will be made to prove sufficient tonnage to warrant purchase and operation.

Your company also holds an option, recently taken, on a mercury prospect some twenty miles northwest of Rosario. Samples from initial development are not encouraging.

Total expenditures on Expansion projects amounted to $23,214.96.

CONCLUSION

The policies of the Officers and Board of Directors, in respect to production plans and the general conduct of the property, have been fully complied with.

In their consummation the entire staff has cooperated untiringly, with resultant excellent earnings, despite the low average price for silver and the handicap of an abnormally dry year, necessitating the operation of the Diesel power units with their added expense. The general condition of the property is very satisfactory.

Respectfully submitted,

H. K. Matheson,
General Manager.

Annex "A"—Active Ore Reserves *

ESTIMATED RESERVES (13 and 14 cu. ft. per ton)	Average Width Feet			Tons of Ore Plus	Av. Troy ounces Per Ton		Total Troy ounces	
Veins	Vein	Waste	Stope	Waste	Ag.	Au.	Ag.	Au.
Independencia Group								
Independencia	1.95	1.81	3.76	9,763	16	.04	159,135	408
San Blas No. 2	.99	1.95	2.94	17,886	9	.06	158,769	1,110
Salvador Group								
Salvador	1.64	1.84	3.48	29,143	20	.06	597,008	1,608
Jucuara No. 1 (Fortuna)	2.36	1.65	4.01	130,478	27	.06	3,458,406	7,807
Fortuna—North	1.87	1.49	3.36	2,630	21	.04	54,769	105
Fortuna Vein	2.00	1.43	3.43	4,815	15	.04	73,172	169
Carmen	2.40	1.61	4.01	21,977	19	.03	415,792	712
Jucuara Group								
Jucuara No. 2	2.81	2.47	5.28	151,043	22	.26	3,331,323	38,607
Jucuara No. 3	1.73	2.11	3.84	10,204	12	.26	118,166	2,625
Jucuara No. 4	2.56	1.41	3.97	19,118	26	.08	506,183	1,466
Jucuara No. 5	2.60	1.90	4.50	2,160	14	.10	31,200	212
Santa Fe Group								
Santa Fe No. 1	1.92	1.65	3.57	46,453	22	.17	1,014,785	7,770
Santa Fe No. 2	2.75	2.53	5.28	60,449	46	.44	2,761,046	26,769
Santa Fe No. 3	2.16	1.84	4.00	14,391	30	.35	433,888	4,988
San Benito No. 1	1.14	2.05	3.19	5,619	16	.18	88,796	995
San Benito No. 2	1.58	1.48	3.06	24,552	29	.33	719,098	8,186
Old Mine Group								
San Joaquin	1.00	2.00	3.00	3,538	19	.28	68,717	987
Colonia	1.01	2.08	3.09	8,980	15	.13	130,939	1,169
Colonia No. 2	1.38	1.62	3.00	1,602	11	.10	17,541	163
Capitana	.81	2.19	3.00	2,285	3	.28	6,664	639
Southwest No. 1	3.25	1.77	5.02	48,280	23	.12	1,116,545	5,843
Southwest No. 2	2.68	2.07	4.75	17,326	16	.09	277,569	1,557
Southwest No. 3	1.47	3.03	4.50	14,459	14	.03	207,130	473
Southwest No. 4	1.58	2.92	4.50	9,700	27	.11	260,097	1,023
Termopilas	1.51	1.84	3.35	3,582	13	.20	45,980	720
Other Veins								
Veta No. 4 South	1.43	1.57	3.00	22,467	20	.03	447,046	692
Santa Gertrudis	1.28	1.72	3.00	21,840	15	.07	330,715	1,538
TOTALS				704,740	23.88	.1679	16,830,479	118,341

Broken Ore in Stopes

BROKEN ORE RESERVE (20.5 cu. ft. per ton) **Veins**					
Independencia	178				
San Blas No. 2	927				
Salvador	9,940				
Jucuara No. 1 (Fortuna)	29,467				
Fortuna	2,206				
Jucuara No. 2	3,155				
Santa Fe No. 1	3,642				
Santa Fe No. 2	2,422				
San Benito No. 2	2,054				
Mine Storage Chutes	492				
Mill Ore Bin	431				
TOTAL	54,914	30.00	.1000	1,647,420	5,491
Total Active Reserves as of Jan. 1, 1940	759,654	24.32	.1630	18,477,899	123,832

*Note: While it is inherently probable that the tonnages and grades when actually mined from these individual veins will vary somewhat, up or down, from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

Annex "B"—Inactive Ore Reserves

ESTIMATED RESERVES (13 cu. ft. per ton) Veins	Tons. of ore plus waste	Av. Troy Ozs. per ton Ag.	Au.	Total Troy ounces Ag.	Au.
Esperanza (South San Miguel Extension South)	5,450	14	.04	76,300	218
Porvenir	2,088	13	.03	27,189	53
Nuevo	8,450	9	.11	76,050	929
Veta No. 4—North	4,166	11	.03	45,780	126
Total Inactive Reserves as of Jan. 1, 1940	20,154	11	.07	225,319	1,326

Annex "C"

Veins and Groups	Drifts	Cross-cuts	Raises	Total Feet
Independencia Group				
Independencia	169	29	237	435
San Blas No. 2	711	220	463	1,394
Salvador Group				
Salvador	1,034	760	477	2,271
Jucuara No. 1 (Fortuna)	762	1,073	1,442	3,277
Fortuna	86	296	...	382
Carmen	319	311	763	1,393
Jucuara Group				
Jucuara No. 2	1,608	1,265	736	3,609
Jucuara No. 3	420	89	211	720
Jucuara No. 4	...	265	...	265
Santa Fe Group				
Santa Fe Main Vein	53	...	9	62
Santa Fe No. 1	765	15	732	1,512
Santa Fe No. 2	81	...	...	81
Santa Fe No. 3	...	146	...	146
San Benito No. 1	77	367	20	464
San Benito No. 2	436	...	99	535
Old Mine Group				
Southwest No. 1	1,704	773	1,489	3,966
Southwest No. 2	512	872	103	1,487
Southwest No. 3	460	32	535	1,027
Southwest No. 4	760	36	241	1,037
Termopilas	766	146	391	1,303
Rosario	170	1,924	...	2,094
San Joaquin	48	986	33	1,067
Guadalupe	62	279	...	341
Other Veins				
Santa Gertrudis No. 1	675	271	144	1,090
Santa Gertrudis No. 2	20	...	...	20
Veta No. 4 North	60	137	...	197
Veta No. 4 South	496	...	404	900
Porvenir	...	128	...	128
Santa Elena Group				
Santa Elena	133	37	...	170
Zopilotera	...	1,725	...	1,725
Crosscuts				
Upper 150 Aguacatal Crosscut	...	720	...	720
Lower 400 Aguacatal Crosscut	...	640	...	640
Esperanza-Jutiapa	...	598	145	743
Ore Pass No. 14	...	...	699	699
Waste Pass No. 11	...	...	710	710
Shaft Raises				
Shaft No. 3	...	67	113	180
Shaft No. 4	...	776	556	1,332
Shaft No. 5	...	97	78	175
TOTALS	12,387	15,080	10,830	38,297

Annex "D"

From Stoping Operations:

Veins	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Independencia Group													
Independencia	268	142	272	344	169	101	61	...	...	...	...	251	1,608
San Blas No. 2	662	283	13	...	102	47	248	320	444	797	30	499	3,445
Salvador Group													
Salvador	1,410	1,625	1,568	1,627	1,585	738	1,193	1,826	2,466	1,520	1,118	926	17,602
Jucuara No. 1 (Fortuna)	4,771	5,663	7,084	6,339	7,424	7,679	7,716	5,316	4,360	3,066	2,062	3,639	65,119
Fortuna	716	661	1,365	1,222	826	114	...	13	87	539	340	7	5,890
Carmen	381	355	589	430	720	726	840	936	1,201	1,521	867	629	9,195
Jucuara Group													
Jucuara No. 2	1,394	1,761	1,763	1,579	1,088	873	1,354	1,263	1,847	2,373	2,278	2,011	19,584
Jucuara No. 3	429	24	...	...	...	...	...	...	...	679	392	9	1,533
Jucuara No. 4	277	259	142	218	246	408	269	204	141	382	...	...	2,546
Santa Fe Group													
Santa Fe Main Vein	89	102	137	151	104	49	41	25	...	...	...	...	698
Santa Fe No. 1	490	208	243	...	38	22	...	...	402	532	953	1,239	4,127
Santa Fe No. 2	562	12	...	...	5	...	...	2	11	34	1,960	925	3,511
Santa Fe No. 3	902	206	200	143	108	88	116	111	181	120	130	119	2,424
San Benito No. 1	466	572	396	265	183	367	178	82	79	224	135	97	3,044
San Benito No. 2	12	...	...	...	...	...	295	5	14	299	844	439	1,908
Old Mine Group													
Capitana	20	11	...	...	...	...	...	182	134	...	...	...	347
Colonia	...	30	...	...	...	...	...	...	...	...	...	...	30
San Joaquin	253	138	22	...	214	284	250	25	...	...	...	...	1,186
Southwest No. 1	...	...	...	...	...	...	...	295	256	375	491	555	1,972
Old Fills	...	...	46	530	299	115	89	15	...	...	...	...	1,094
Miscellaneous Group													
Veta No. 4 North	...	...	...	...	...	...	78	...	...	...	...	...	78
Veta No. 4 South	...	...	...	...	...	241	99	...	...	...	...	...	340
STOPING TOTALS	13,102	12,052	13,840	12,848	13,111	11,852	12,827	10,620	11,623	12,461	11,600	11,345	147,281

From Development Operations:

Veins	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Independencia Group													
Independencia	...	...	...	...	...	26	93	293	170	2	...	61	645
San Blas No. 2	8	45	...	...	95	61	133	95	204	237	198	182	1,258
Salvador Group													
Salvador	40	33	64	104	162	143	363	239	283	340	202	64	2,037
Jucuara No. 1 (Fortuna)	238	253	546	132	109	35	256	574	303	129	134	198	2,907
Fortuna	80	...	...	...	19	...	...	...	...	...	...	...	99
Carmen	194	144	201	89	16	55	102	187	199	67	104	82	1,440
Jucuara Group													
Jucuara No. 2	439	421	432	140	387	478	586	279	43	110	19	51	3,385
Jucuara No. 3	...	...	...	...	...	...	29	30	...	28	...	...	87
Santa Fe Group													
Santa Fe Main Vein	47	134	...	...	...	...	...	...	...	...	...	...	181
Santa Fe No. 1	112	235	171	52	166	180	110	426	400	80	124	86	2,142
Santa Fe No. 2	...	...	...	...	...	...	...	...	...	...	...	23	23
San Benito No. 1	134	13	...	...	...	...	...	...	...	...	...	...	147
San Benito No. 2	127	70	55	...	...	...	...	...	...	20	49	161	482
Old Mine Group													
Southwest No. 1	393	342	330	421	364	906	578	1,360	1,381	1,412	1,840	1,102	10,429
Southwest No. 2	...	...	...	...	...	...	...	...	...	...	...	783	783
Southwest No. 3	6	31	46	52	95	90	46	313	333	278	162	170	1,622
Southwest No. 4	61	24	...	...	199	222	354	549	37	...	...	...	1,446
Termopilas	...	...	...	...	...	...	...	...	...	110	397	133	640
Rosario	...	...	...	...	...	...	...	...	...	...	...	34	34
San Joaquin	...	...	...	12	19	...	...	...	...	...	...	...	31
Miscellaneous Group													
Veta No 4 South	111	35	11	...	13	...	...	339	200	34	...	66	809
Santa Gertrudis	200	117	119	237	60	13	...	...	...	78	46	70	940
DEVELOPMENT TOTALS	2,190	1,897	1,975	1,239	1,704	2,209	2,650	4,684	3,553	2,925	3,275	3,266	31,567
STOPING TOTALS	13,102	12,052	13,840	12,848	13,111	11,852	12,827	10,620	11,623	12,461	11,600	11,345	147,281
GRAND TOTALS	15,292	13,949	15,815	14,087	14,815	14,061	15,477	15,304	15,176	15,386	14,875	14,611	178,848

Annex "E"

TONNAGE MINED

From October 1, 1907, to January 1, 1940

Veins	Total including Stoping, Devel. & Filling Oct 1, 1907 to Dec. 31, 1938	Total including Stoping, Devel. and Filling For Year 1939	Grand Total including Stoping, Devel. & Filling January 1, 1940
Buena Ventura	98,490	.....	98,490
Candelaria Group	166,573	.....	166,573
Capitana	60,620	347	60,967
Carmen No. 1	24,113	10,635	34,748
Carmen No. 2	1,105	.....	1,105
Catalina	6,587	.....	6,587
Colonia No. 1	61,552	30	61,582
Colonia No. 2	665	.....	665
Concepcion	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	106,245	.....	106,245
Esperanza	8,710	.....	8,710
Fortuna Group	95,073	5,989	101,062
Guadalupe	61,177	.....	61,177
Independencia	287,770	2,253	290,023
Jucuara No. 1 (Fortuna)	172,783	68,026	240,809
Jucuara No. 2	105,213	22,969	128,182
Jucuara No. 3	37,566	1,620	39,186
Jucuara No. 4	19,915	2,546	22,461
Jucuara No. 5	1,901	.....	1,901
56 Fault Vein	4,954	.....	4,954
North	4,647	.....	4,647
Northwest	89,378	.....	89,378
Nueva	28,147	.....	28,147
Porvenir	2,985	.....	2,985
Rosario	150,915	34	150,949
Salvador	604,654	19,639	624,293
San Benito No. 1	110,322	3,191	113,513
San Benito No. 2	14,085	2,390	16,475
San Blas No. 1	6,938	.....	6,938
San Blas No. 2	5,931	4,703	10,634
San Joaquin	70,404	1,217	71,621
San Luis	2,389	.....	2,389
San Miguel North	174,801	.....	174,801
San Miguel Group	125,855	.....	125,855
Santa Fe Main Vein	188,516	879	189,395
Santa Fe No. 1	17,817	6,269	24,086
Santa Fe No. 2	56,750	3,534	60,284
Santa Fe No. 3	34,940	2,424	37,364
Santa Gertrudis No. 1	34,142	940	35,082
Santa Gertrudis No. 2	1,753	.....	1,753
Socorro	22,592	.....	22,592
Southwest No. 1	23,791	12,401	36,192
Southwest No. 2	635	783	1,418
Southwest No. 3	....	1,622	1,622
Southwest No. 4	....	1,446	1,446
Termopilas	1,094	640	1,734
West	97,005	.....	97,005
Veta No. 4 North	10,932	78	11,010
Veta No. 4 South	6,385	1,149	7,534
Ore from Development	63,599	.....	63,599
Miscellaneous	5,380	1,094	6,474
TOTALS	3,304,374	178,848	3,483,222

Summary to Annex "E"

From October 1, 1907, to January 1, 1940

From Stoping	2,688,380
From Development	558,347
From Fills	236,495
TOTAL	3,483,222

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NEW YORK and HONDURAS ROSARIO MINING COMPANY



SIXTIETH ANNUAL REPORT

NINETEEN HUNDRED AND FORTY

REPORT of the
NEW YORK and HONDURAS
ROSARIO MINING COMPANY

NEW YORK

JANUARY 1, 1941

OFFICERS

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H. A. GUESS, *Vice-President*
W. C. LANGLEY, *Treasurer*
J. PERLMAN, *Secretary*

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H. A. GUESS
DR. J. RALPH JACOBY
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W. C. LANGLEY
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WM. A. PRENDERGAST
M. F. SOTO
AMBROSE G. TODD
RICHARD H. VALENTINE

EXECUTIVE COMMITTEE

LEWIS L. CLARKE, *Chairman*
H. A. GUESS
DR. J. RALPH JACOBY
M. F. SOTO
AMBROSE G. TODD

WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

PRESIDENT'S REPORT

February 26, 1941.

To the Stockholders of the
New York and Honduras Rosario Mining Company:

This is the Sixtieth Annual Report, culminating the Three Score Years of the life of the Company.

It is most appropriate, when referring to the long life your Company has enjoyed, to recall also that its mining activities for these sixty years have been conducted within the Republic of Honduras, C. A. Throughout this period, our relations with the Government and people of Honduras have been of a most pleasant character, and never more so than at the present time. We tender to them our sincere appreciation of their attitude towards our Company, and cordial felicitations for the happiness and prosperity of their country.

Your attention is especially directed to the Report of the General Manager, Mr. K. H. Matheson (pages 17 to 40), which gives in great detail a description of the Company's property, and also information regarding its present productive capacity and reserves; upon these last mentioned questions I wish to make the following comments:

Production and Reserves:

The General Manager states, "Notwithstanding a very heavy exploration program throughout the year, no new veins have been found." (Page 20.) This statement is almost identical with statements of the same import in previous annual reports, which are herewith quoted.

1935 (Page 18):

"Of the total crosscut footage shown for the year 1935, over 5,000 feet was purely exploration, compared to less than 2,000 feet the previous year. That exploration was but moderately successful. A few new veins were encountered, but their character and grade, indicated by development to date, give but little promise that they will develop into large ore producers."

1936 (Page 17):

"This very satisfactory increase of 1,481,457 ounces silver and 17,104 ounces of gold, is not to be attributed to the discovery of any large new veins, but to the continued development of already known ones and the intensive development of smaller veins branching from main ore bodies."

1937 (Page 19):

"Although heavy exploration work in the search for new veins has been encouraging, insufficient vein development has as yet been done to warrant considering any new veins as tangible assets at this date."

1938 (Page 19):

"No new veins of apparent importance were discovered notwithstanding the most extensive exploration in the Company's history."

1939 (Page 19):

"The heaviest exploration program in the property's history failed to disclose any new veins of great importance."

While the failure to discover new veins during the years mentioned has been disappointing, this condition now becomes especially significant, in view of the fact that at the end of 1940 we have also sustained a material diminution in reserves. This is shown in the following table of Active Reserves.

December 31st	Tons	Ounces Silver	Ounces Silver per Ton	Ounces Gold	Ounces Gold per Ton
1939	759,654	18,477,899	24.32	123,832	.1630
1940	744,834	16,619,540	22.31	112,320	.1508

Probable Earnings 1941:

In 1939 the final recovery of Silver per ton was 23.023 ounces against an available content averaging 26.75 ounces per ton, and in 1940, 21.087 ounces against an available content averaging 24.32 ounces per ton. It is, therefore, inevitable, especially as development ore going to the mill is of much lower grade than the reserves, that we shall have to reduce the grade of ore to be used this year, as the available content per ton of the active reserves is only 22.31 ounces, resulting in a probable final recovery of about 19.11 ounces per ton. There will be a corresponding reduction in the value per ton of gold. *We therefore face reduced earnings per share for the year 1941.* The best estimate it is possible to make at this time indicates that, using the most reliable factors of production and costs, and Federal taxes at the existing rate of 24%, and the continuance of our present market and price of 35 cents per ounce for silver, our earnings per share would be $2.315. If Federal taxes are increased and made applicable to this year's income, this figure will be reduced.

Exploration Program:

In view of the fact that up to the middle of last year, there had been no new discoveries of moment, your Board of Directors, after a thorough canvass of the subject with the General Manager, decided on commencing immediately (August, 1940) a general Exploration Program to test the further possibilities of the property, this program to be carried into areas not directly related to

our present workings. This new work is estimated to cost between $4,000.00 and $5,000.00 per month, for a period of nine months of the year, and according to present plans, to continue into 1943. This estimated cost is included in the estimates of the cost of operations for the present year.

Status of Silver:

I have already stated that we are basing our estimates of earnings upon the continuance of the present market and price for silver. That market is our own Government, and the maintenance of the present price is in the discretion of the Government.

Taxation:

You have been kept fully informed, through our Quarterly Reports, of the increase in Federal Taxes, which at the beginning of 1940, were 18%. This figure was increased to 24% during the year, and made applicable to our entire income for that year. There may be a further increase, a possibility we have anticipated in our discussion of the probable earnings per share for this year.

Expansion:

We have considered, and, in a number of cases, made examinations of properties in Honduras and elsewhere. There were in all twenty-five such properties, but while we have certain options under consideration, the final arrangements have not been consummated.

Treasury Stock:

In accordance with the action taken at the last meeting of Stockholders, which directed the cancellation of 11,633 shares of the Company's stock held in its Treasury, I wish to report that our Certificate of Incorporation was amended on April 16, 1940, reducing the capital stock of the Company, and the stock was cancelled on May 16, 1940.

Neptune Gold Mining Company:

When the Annual Report of this Company is issued about the month of April, a copy will be mailed to you.

Interest on the debentures held by us, $570,267.57, has been paid to June 30, 1940. This amount represents the present entire investment of the New York and Honduras Rosario Mining Company in the Neptune Gold Mining Company.

Death of Mr. Irving Heidell (Director):

It is with great regret that I herewith record the death, on May 13, 1940, of Mr. Irving Heidell, a director of this Company since October 17, 1911.

Mr. Heidell left with us a memory of unfailing interest in the Company's welfare, for which those who served with him retain the highest appreciation.

Change in the Number of Directors:

On September 11, 1940, acting under authority conferred by the By-Laws, the Board of Directors reduced the membership of the Board from eleven to ten.

General Financial and Statistical Matters:

For statistical information regarding our operations, we refer you to "Comparative Statement of Operations" for the years 1940 and 1939, page 8.

The profit realized for the year 1940, after deducting all charges that arose in the operation of the Company's business, was $633,573.94, equal to $3.3635 per share. The Board of Directors decided to establish a "Reserve for Contingencies" of $25,000.00, from the profits of 1940, which reservation (although still intact), reduces the profit to $608,573.94, equal to $3.2307 per share.

We paid in dividends from earnings for the year 1940, $593,356.05, or $3.15 per share, compared with $800,559.75, or $4.25 per share in 1939.

Our Income from Investments and Sundry Items in 1940 was $85,553.82, compared with $95,015.71 in 1939.

We had marketable securities on December 31, 1940, which cost $1,207,906.59, and the market value of which was $1,069,042.09, a difference between cost and market of $138,864.00, or $11\frac{1}{10}\%$. On December 31, 1939, the difference between cost and market value of the securities held on that date was $18\frac{41}{100}\%$.

There is submitted with this report and made a part hereof:

1. A Comparative Statement of Operations for the years 1940 and 1939;
2. A Comparative Income and Profit and Loss Statement for the years ended December 31, 1940 and December 31, 1939;
3. A Balance Sheet for the year ended December 31, 1940;
4. A Statement of the Surplus Account for the year ended December 31, 1940;
5. A List of the Securities held by this Company December 31, 1940;
6. A Table showing Bullion Production and Dividend Distribution to Stockholders, from the organization of the Company, including all the dividends paid from the earnings of the year 1940.

Respectfully submitted,

WM. A. PRENDERGAST,

President

Comparative Statement of Operations
For the Years 1940 and 1939

	Year 1940	Year 1939	Increase* Decrease
Total sales value of Gold and Silver recovered	$2,175,173.15	$2,313,920.24	$138,747.09
Tons of ore milled	184,600	178,900	5,700 *
Ounces of Silver recovered	3,892,770.01	4,118,863.77	226,093.76
Number of ounces of Silver recovered per ton of ore	21.08759	23.02327	1.93568
Sales value of Silver recovered	$1,365.019.70	$1,688.249.14	$323,229.44
Average sales value of Silver per ounce	$ .35065	$ .40988	$ .05923
Average cost of Silver per ounce**	$ .16006	$ .19844	$ .03838
Average profit on Silver per ounce**	$ .19059	$ .21144	$ .02085
Average sales value of Silver recovered per ton of ore	$ 7.3945	$ 9.4368	$ 2.0423
Average cost of Silver per ton of ore**	$ 3.3752	$ 4.5688	$ 1.1936
Average profit on Silver recovered per ton of ore**	$ 4.0193	$ 4.8680	$ .8487
Ounces of Gold recovered	23,147.241	17,876.317	5,270.924 *
Number of ounces of Gold recovered per ton of ore	.12539	.09992	.02547*
Total sales value of Gold recovered	$ 810,153.45	$ 625,671.10	$184,482.35 *
Average sales value of Gold per ounce	$ 35.00	$ 35.00	....
Value of Gold recovered per ton of ore	$ 4.3887	$ 3.4973	$ .8914 *
Number of bars of Bullion shipped from mine	2,306	2,431	125

**After giving credit for sales value of Gold recovered.

Income and Profit and Loss Statement

For the Years Ended December 31, 1940, and December 31, 1939

	Year 1940	Year 1939	Increase* Decrease
Production of Gold and Silver	$2,175,173.15	$2,313,920.24	$138,747.09
Less freight and other expenses on bullion	103,158.01	108,469.38	5,311.37
OPERATING INCOME	$2,072,015.14	$2,205,450.86	$133,435.72
Operating expenses	1,242,155.33	1,246,516.38	4,361.05
MINE OPERATING PROFIT	$ 829,859.81	$ 958,934.48	$129,074.67
New York administrative and general expenses	87,906.43	88,051.47	145.04
NET OPERATING PROFIT	$ 741,953.38	$ 870,883.01	$128,929.63
Add income from investments, etc.	85,553.82	95,015.71	9,461.89
	$ 827,507.20	$ 965,898.72	$138,391.52
Less other deductions from income (Note A)	57,516.32	32,021.21	25,495.11*
PROFIT BEFORE FEDERAL INCOME TAX AND PROVISION FOR DEPLETION	$ 769,990.88	$ 933,877.51	$163,886.63
Federal normal income tax estimated (Note B)	104,762.44	90,242.14	14,520.30*
	$ 665,228.44	$ 843,635.37	$178,406.93
Appropriated for depletion from earnings (Note C)	31,654.50	10,667.32	20,987.18*
	$ 633,573.94	$ 832,968.05	$199,394.11
Reserve for contingencies appropriated from earnings, per resolution of Board of Directors on January 15, 1941	25,000.00	.....	25,000.00*
NET PROFIT	$ 608,573.94	$ 832,968.05	$224,394.11
NOTE A—Other deductions from income include:			
Investigations of outside properties	$ 41,126.80	$ 18,496.20	$ 22,630.60*
Federal capital stock tax, New York State franchise tax and New York City gross receipts tax	9,466.25	10,092.18	625.93
Obsolete inventory written off	3,604.24	1,764.56	1,839.68*
Business association dues, subscriptions and donations	910.00	610.00	300.00*
Moving expenses	1,398.19	.....	1,398.19*
Sundry	1,010.84	1,058.27	47.43
	$ 57,516.32	$ 32,021.21	$ 25,495.11

NOTE B—No provision is required for Federal Excess Profits Taxes.
NOTE C—Beginning with the year 1932, depletion has been taken in tax returns on a percentage basis in accordance with respective revenue acts. Entries recording depletion as they affect the older portion of the property are carried in the general accounts. Depletion deductions on ore mined from the newer discoveries, which newer discoveries are not carried on the books, are made for income tax purposes only.

BALANCE

DECEMBE

ASSETS

Mines, Plant and Equipment			
Mines, real estate and concessions	$3,000,000.00		
Less allowance for depletion of mines	2,274,995.27	$725,004.73	
Buildings, machinery and equipment	$2,300,001.99		
Less allowance for depreciation	1,796,680.54	503,321.45	$1,228,326.18
Current Assets			
Cash		$462,020.06	
Bullion at smelters and in transit—less allowance for expenses		330,219.36	
Marketable securities—at cost:			
United States Treasury bonds	$ 135,000.00		
State and municipal bonds	107,030.21		
Public Authority bonds	207,937.50		
Domestic corporation bonds	349,898.75		
Domestic corporation stocks	408,040.13		
	$1,207,906.59		
Less reserve to reduce to aggregate quoted market prices	138,864.50		
	$1,069,042.09		
Interest accrued on bonds	4,901.49	1,073,943.58	
Broken ore in stopes and mill bins—at cost		207,637.38	
Inventories—materials and supplies—at cost		288,161.52	2,361,981.90
Investments and Other Assets			
Neptune Gold Mining Company, ten-year 5% income debenture notes, due March 1, 1948, principal amount $570,267.57, and 5,100 shares of its capital stock of no par value—at cost		$570,267.57	
Sundry accounts receivable		4,308.24	574,575.81
Deferred Charges			
Advance to Government of Honduras to apply against income taxes for the years 1941 to 1960 inclusive		$250,000.00	
Inventories of supplies, prepaid insurance, taxes, etc.		136,231.44	386,231.44
			$4,551,115.33

LIABILITIES

Current Liabilities			
Drafts payable		$ 46,192.04	
Accounts payable		70,425.62	
Accrued taxes		5,500.00	
Provision for federal income tax—estimated		104,762.44	$ 226,880.10
Reserve for Contingencies			25,000.00
Capital Stock and Surplus			
Capital stock (par value $10.00 per share):			
Authorized and issued 188.367 shares		$1,883.670.00	
Surplus:			
Earned	$1,901,779.99		
Appreciation of mines	$1,500,000.00		
Less depletion earned	986,214.76	513,785.24	2,415,565.23	4,299,235.23
			$4,551,115.33

Surplus

Year Ended December 31, 1940

EARNED SURPLUS

Balance at January 1, 1940		$1,864,308.83
ADDITIONS		
Net profit for the year	$608,573.94	
Restoring to earned surplus portion of reserve previously provided to adjust marketable securities to market prices, not required at December 31, 1940, because of increase in quoted prices of securities by this amount during year	22,253.27	630,827.21
		$2,495,136.04
DEDUCTIONS		
Dividends paid, totaling $3.15 per share:		
March 30, 1940—$.75 per share	$141,275.25	
June 29, 1940— .75 per share	141,275.25	
September 28, 1940— .75 per share	141,275.25	
December 28, 1940— .90 per share	169,530.30	593.356.05
Balance at December 31, 1940		$1,901,779.99

SURPLUS FROM APPRECIATION OF MINES

Balance at January 1, 1940	$545,439.74	
Less allowance for depletion on appreciation of mine valuation applicable to 1940 production	31,654.50	
Balance at December 31, 1940		$ 513,785.24
Total surplus at December 31, 1940		$2,415,565.23

Marketable Securities

December 31, 1940

	Par Value	Market Value	
Bonds			
United States Government			
2¼% Treasury Bonds, due June 15, 1956-1954	$135,000.00	$143,479.69	
New York State			
3% General State Improvement Bonds, due July 1, 1941	10,000.00	10,150.00	
New York City			
3% Corporate Stock for Transit Unification, Series R-31, due June 1, 1980	100,000.00	103,500.00	
Port of New York Authority			
3% General and Refunding Bonds:			
Sixth Series, due December 1, 1975.	50,000.00	51,000.00	
Fourth Series, due December 15, 1976	50,000.00	51,125.00	
Triborough Bridge Authority			
3¼% Sinking Fund Revenue Bonds due February 1, 1980	100,000.00	105,625.00	$464,879.69
Domestic Railroads			
Chicago and North Western Railway Co., 1st and Refunding Mortgage 4½% Gold Bonds, due May 1, 2037.	25,000.00	$ 2,500.00	
The Chicago, Rock Island and Pacific Railway Co., 1st and Refunding Mortgage 4% Gold Bonds, due April 1, 1934	50,000.00	3,750.00	
New Orleans, Texas and Mexico Railway Co., 1st Mortgage 5½% Gold Bonds, Series "A", due April 1, 1954	25,000.00	8,250.00	
New York, Chicago and St. Louis R.R. Co., Refunding Mortgage 4½% Bonds, Series "C", due September 1, 1978	50,000.00	29,687.50	
St. Louis-San Francisco Railway Co., Prior Lien Mortgage 5% Gold Bonds, Series "B", due July 1, 1950.	50,000.00	5,125.00	49,312.50
Public Utilities			
Electric Power and Light Corp. 5% Gold Debentures, due February 1, 2030	50,000.00	$ 44,000.00	
Joplin Water Works Co., 1st Mortgage 5% Gold Bonds, Series "A", due March 1, 1957	25,000.00	26,250.00	
Mississippi Power and Light Co., 1st Mortgage 5% Gold Bonds, due December 1, 1957	50,000.00	52,750.00	
National Power and Light Co., 5% Gold Debentures, Series "B", due May 1, 2030	50,000.00	53,750.00	176,750.00
			$690,942.19

Marketable Securities—Continued

	Par Value	Market Value	
Miscellaneous			$690,942.19
New York World's Fair 1939 Incorporated 4% Debentures, due January 1, 1941	$ 4,475.00	$ 379.90	379.90

	Number of Shares		
Stocks			
Public Utilities Preferred			
Arkansas Power and Light Co., $6.00 cumulative preferred stock, no par	500	$ 39,750.00	
The Commonwealth and Southern Corp., $6.00 cumulative preferred stock, no par	550	28,187.50	
Florida Power and Light Co., $7.00 cumulative preferred stock, no par	500	57,500.00	
Jersey Central Power and Light Co., 5½% cumulative preferred stock, par value $100.00 per share	500	47,750.00	
Public Service Co. of Indiana, $7.00 cumulative prior preferred stock, no par	500	47,500.00	220,687.50
Common Stocks, Etc.			
American Chicle Co., common stock, no par	1,000	$120,000.00	
American Gas and Power Co., common stock, par value $1.00 per share	800	2,400.00	
American Gas and Power Co., Warrants for subscription to common stock	400	400.00	
The Home Insurance Co., New York, capital stock, par value $5.00 per share	621	20,182.50	
Iowa Southern Utilities Company of Delaware, common stock, par value $15.00 per share	2,100	6,300.00	
Dividend arrears certificate on 500 shares of 7% cumulative preferred stock		7,750.00	157,032.50
Total market value at December 31, 1940			$1,069,042.09

Other Investments (at cost)

Neptune Gold Mining Company, ten year 5% income debenture notes due March 1, 1948, principal amount $570,267.57, and 5,100 shares of its capital stock of no par value	$570,267.57

Report of Auditors

New York and Honduras Rosario Mining Company:

We have examined the balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY as at December 31, 1940, and the statements of income and surplus for the year then ended, have reviewed the system of internal control and accounting procedures of the Company at the New York office, including minutes of stockholders' and directors meetings; we examined reports received from the mine office in Honduras, and have examined or tested accounting records of the Company and other supporting evidence, at the New York office, by methods and to the extent we deemed appropriate.

Cash, securities and bullion were verified by actual count, inspection of documents and by direct communication with custodian or depositaries. Provision for depletion and depreciation charged to income, as in the past, represents the maximum amount allowable under federal revenue acts applicable to properties carried on the books.

In our opinion, the accompanying balance sheet and related statements of income and surplus present fairly the position of the Company at December 31, 1940, and the results of its operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST.

New York, N. Y.
February 17, 1941.

Table Showing

Bullion Production		Distribution to Stockholders		
1882	$2,452.27	1887 No. 1	$ 37,500— 2½%	($ .25 per share) Dividend
1883	12,900.42	1888 Nos. 2 to 8	112,500— 7½%	(.75 per share) Dividend
1884	149,741.39	1889 Nos. 9 to 14	97,500— 6½%	(.65 per share) Dividend
1885	244,444.70			
1886	224,157.58	1891 Nos. 15 to 17	45,000— 3%	(.30 per share) Dividend
1887	613,446.05	1892 Nos. 18 to 22	187,500—12½%	(1.25 per share) Dividend
1888	767,632.15	1893 Nos. 23 to 26	150,000—10%	(1.00 per share) Dividend
1889	590,189.55			
1890	113.28	1896 Nos. 27 to 30	60,000— 4%	(.40 per share) Dividend
1891	369,587.19	1897 Nos. 31 to 42	180,000—12%	(1.20 per share) Dividend
1892	614,498.67	1898 Nos. 43 to 50	120,000— 8%	(.80 per share) Dividend
1893	492,534.87	1899 Nos. 51 to 63	195,000—13%	(1.30 per share) Dividend
1894	392,485.92	1900 Nos. 64 to 78	255,000—17%	(1.70 per share) Dividend
1895	158,164.42	1901 Nos. 79 to 95	255,000—17%	(1.70 per share) Dividend
1896	449,525.88	1902 Nos. 96 to 100	75,000— 5%	(.50 per share) Dividend
1897	568,872.06	1903 No. 101	15,000— 1%	(.10 per share) Dividend
1898	611,467.76	1904 Nos. 102 to 110	135,000— 9%	(.90 per share) Dividend
1899	798,994.77	1905 Nos. 111 to 124	195,000—13%	(1.30 per share) Dividend
1900	827,443.12	1906 Nos. 125 to 142	285,000—19%	(1.90 per share) Dividend
1901	780,760.18	1907 Nos. 143 to 155	195,000—13%	(1.30 per share) Dividend
1902	490,273.34	1908 Nos. 156 to 167	180,000—12%	(1.20 per share) Dividend
1903	436,818.29	1909 Nos. 168 to 175	120,000— 8%	(.80 per share) Dividend
1904	721,374.87	1910 Nos. 176 to 181	120,000— 8%	(.80 per share) Dividend
1905	993,065.39	1911 No. 182	45,000— 3%	(.30 per share) Dividend
1906	1,112,171.69	1912 Nos. 183 to 184	70,000— 3½%	(.35 per share) Dividend
1907	791,347.62			
1908	788,910.23	1913 Nos. 185 to 189	220,000—11%	(1.10 per share) Dividend
1909—10 months	636,500.00	1914 Nos. 190 to 194	260,000—13%	(1.30 per share) Dividend
1910	890,700.00	1915 Nos. 195 to 199	280,000—14%	(1.40 per share) Dividend
1911	887,169.59	1916 Nos. 200 to 207	400,000—20%	(2.00 per share) Dividend
1912	944,212.67			
1912-13—12 months	1,051,273.28	1917 Nos. 208 to 212	260,000—13%	(1.30 per share) Dividend
1913—last 3 months	328,100.05	1917 Nos. 1 and 2	* 140,000— 7%	(.70 per share) Dividend
1914	1,239,877.13	1918 Nos. 213 to 216	200,000—10%	(1.00 per share) Dividend
1915	1,191,760.70	1918 Nos. 3 to 6	* 200,000—10%	(1.00 per share) Dividend
1916	1,553,114.86	1919 Nos. 217 to 220	200,000—10%	(1.00 per share) Dividend
1917	1,674,193.80	1919 Nos. 7 to 10	* 200,000—10%	(1.00 per share) Dividend
1918	1,803,751.79	1920 Nos. 221 to 226	320,000—16%	(1.60 per share) Dividend
1919	2,115,158.25	1920 No. 11	* 40,000— 2%	(.20 per share) Dividend
1920	1,568,612.32			
1921	466,956.02	1922 Nos. 227 to 230	200,000—10%	(1.00 per share) Dividend
1922	1,066,732.57	1923 Nos. 231 to 235	250,000—12½%	(1.25 per share) Dividend
1923	1,421,911.15	1924 Nos. 236 to 241	350,000—17½%	(1.75 per share) Dividend
1924	1,584,610.32	1925 Nos. 242 to 249	400,000—20%	(2.00 per share) Dividend
1925	1,763,023.16	1926 Nos. 250 to 257	400,000—20%	(2.00 per share) Dividend
1926	1,601,429.35			
1927	1,341,300.06	1927 Nos. 258 to 265	400,000—20%	(2.00 per share) Dividend
1928	1,500,233.98	1928 Nos. 266 to 274	450,000—22½%	(2.25 per share) Dividend
1929	1,477,710.79	1929 Nos. 275 to 283	500,000—25%	(2.50 per share) Dividend
1930	1,315,821.38	1930 Nos. 284 to 290	371,677—18¾%	(1.87½ per share) Dividend
1931	1,403,104.20	1931 Nos. 291 to 297	364,159—18¾%	(1.87½ per share) Dividend
1932	1,355,117.43	1932 Nos. 298 to 303	283.874—15%	(1.50 per share) Dividend
1933	1,910,740.17	1933 Nos. 304 to 312	659,324—35%	(3.50 per share) Dividend
1934	1,965,520.68	1934 Nos. 313 to 321	753,468—40%	(4.00 per share) Dividend
1935	2,109,313.47	1935 Nos. 322 to 330	800,559—42½%	(4.25 per share) Dividend
1936	2,037,208.11	1936 Nos. 331 to 337	734,632—39%	(3.90 per share) Dividend
1937	2,203,125.13	1937 Nos. 338 to 341	833,525—44¼%	(4.425 per share) Dividend
1938	2,144,214.86	1938 Nos. 342 to 345	734,631—39%	($3.90 per share) Dividend
1939	2,313,920.24	1939 Nos. 346 to 349	800,560—42½%	(4.25 per share) Dividend
1940	2,175,173.15	1940 Nos. 350 to 353	593,356—31½%	(3.15 per share) Dividend
	$63,044,964.32		$15,729,766	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00
Dividends 183 to 284, inclusive, were paid on Capital Stock of 2,000,000.00
*Dividends Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00
Dividends 285 to 353, inclusive, were paid on outstanding capital stock.

GENERAL MANAGER'S REPORT

January 1, 1941.

To the Officers and Directors of the
New York & Honduras Rosario Mining Company:

The results of your mining operations during the year 1940 and the present physical condition of the property are set forth in the following report, respectfully submitted for your consideration.

Production

	1940	1939
Dry Tons Treated	184,600	178,900
Average per ton—Troy ounces silver milled	23.0419	25.4986
Average per ton—Troy ounces gold milled	.13389	.10808
Total Troy ounces silver milled	4,253,538	4,561,705
Total Troy ounces gold milled	24,716	19,336
Total Troy ounces silver produced	3,899,164	4,118,887
Total Troy ounces gold produced	23,173	17,880
Average per ton—Troy ounces silver produced	21.1222	23.0234
Average per ton—Troy ounces gold produced	.12553	.09994
Ratio of gold to silver	1:168	1:230
Bars of Doré Bullion	2,306	2,431
Bullion Fineness of Silver	962.222	960.736
Bullion Fineness of Gold	5.719	4.171
Custom Ore & Au. Bullion—Not included above:		
Troy ounces gold	10.289	8.843

The uninterrupted operation of the mill throughout the year resulted in a record tonnage, averaging somewhat better than 15,000 tons a month. The mining of ore containing approximately the same ratio of gold to silver as existing in the reserves, resulted in a new record gold production amounting to 23,173 ounces.

Notwithstanding that the mill head was lowered more than two ounces from that of the previous year, silver production resulted in only 219,000 odd ounces less than the record year of 1939.

Inasmuch as development ore still constitutes about 18% of production tonnage, and this development tonnage is of much lower grade than the reserves, it is planned during 1941 to lower the mill head to around 21 ounces silver so as not to affect unduly the grade of the already existing reserves.

Honduras Operating Costs in U. S. Currency

	YEAR 1940	Total Cost		YEAR 1939	Total Cost	Cost Per Ton 1940	Cost Per Ton 1939	Cost Per Ounce of Silver 1940	Cost Per Ounce of Silver 1939
MINING									
Labor	$370,926.45			$377,274.09					
Supplies	259,170.90			254,654.96					
Power	12,695.12			10,915.23					
Depreciation	9,441.14			9,033.04					
ORE MINED AND MILLED									
First of Year $227,255.39			$248,294.13						
Last of Year 207,637.38	19,618.01	$671,851.62	227,255.39	21,038.74	$672,916.06	$3.64	$3.76	$.1726	$.1634
MILLING									
Labor	$ 77,014.52			$ 76,627.45					
Supplies	211,419.49			231,502.97					
Power	27,624.09			26,346.11					
Depreciation	46,630.02	362,688.12		42,786.14	377,262.67	1.96	2.11	.0932	.0916
ADMINISTRATION									
Labor	$156,074.12			$146,345.26					
Supplies	36,652.21			35,498.40					
Depreciation	14,889.26	207,615.59		14,493.99	196,337.65	1.12	1.10	.0533	.0476
		$1,242,155.33			$1,246,516.38	$6.72	$6.97	$.3191	$.3025
Credit for Gold		810,153.45			625,671.10	4.38	3.50	.2081	.1519
Net Cost of Silver		$432,001.88			$620,845.28	$2.34	$3.47	$.1110	$.1507

Honduras Operating Costs

On account of the large tonnage treated and various economies effected, the cost per ton shows a new low, a decrease of 25 cents from the previous year. There is included in this cost 14½ cents per ton for Diesel power, an item which it is hoped will be substantially decreased during 1941 through the completed installation of a new penstock and new generating unit for the San Juancito Power Plant.

Average Number of Men Employed

Slightly over 1,000 men per day were employed during the year.

THE MINE

Ore Reserves

The detail of the Ore Reserves summarized below as of the end of 1940 is shown in Annex "A":

Comparative Summary—Active Ore Reserves

Based on silver at 35 *cents and gold at* $35.00 *per Troy oz.*

	Tons of Ore plus Waste	Av. Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
January 1, 1941	744,834	22.31	.1508	16,619,540	112,320
January 1, 1940	759,654	24.32	.1630	18,477,899	123,832
Decrease	14,820	2.01	.0122	1,858,359	11,512

Comparative Summary—Inactive Ore Reserves

	Tons of Ore plus Waste	Av. Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
January 1, 1941	20,154	11.00	.07	225,319	1,326
January 1, 1940	20,154	11.00	.07	225,319	1,326

It may be noted that although the decrease in tonnage in the Active Reserves is only 14,820, the silver reserve has suffered a loss of 1,858,359 ounces, with a corresponding loss in gold. It is evident from these figures that the ore developed during the year was of much lower grade than the general average of the reserves, resulting in a decrease per ton value of 2.01 ounces silver and .0122 ounce gold. 4,253,538 ounces of silver were sent to the mill during the year, and the difference between that figure and the diminution in the reserves at the end of 1940, was made up largely from development in the Southwest veins, the Salvador, the San Benito No. 2, and the Santa Gertrudis; but in each case ore developed has been relatively low grade.

Notwithstanding a very heavy exploration program throughout the year, no new veins have been found.

A still heavier exploration program is proposed for the year 1941, details of which will be given later in this report.

Ore Production

Annex "D", showing detail of ore production, is summarized below, and comparison made with former years.

	1940	1939	1938	1937
From Stoping	151,153	147,281	120,094	122,669
From Development	33,575	31,407	34,407	39,679
Total	184,728	178,848	154,501	162,348

Ore from development constituted 18.2% of the total tonnage. All this ore came from veins already extensively developed, and the outlook for development ore during 1941 is scarcely as good as it was a year ago.

Exploration, Development and Operating Connections

Summary of Annex "C"

Year	Drifts	Crosscuts	Raises	Winzes	Total Ft.
1940	13,855	13,855	10,006	47	37,763
1939	12,387	15,080	10,830	..	38,297
Increase	1,468			47	
Decrease		1,225	824		534

	1940	1939	1938	1937
Development Feet Driven	37,763	38,297	31,113	32,137

Operating Crosscuts and Raises Below the Peña Blanca Level

Shaft Raise No. 4, the material-handling raise servicing the Southwest territory below the Peña Blanca level, was in operation early in 1940, thus making possible a heavy stoping and development program in this section of the mine.

The completion of Shaft Raise No. 3 early in the year facilitated the handling of supplies and material in the San Benito and Santa Fe areas, where operations were noticeably increased over the previous year.

The completion of these material-handling raises now gives ready access to all the mine workings below the Peña Blanca level at four distinct and widely separated points. Each shaft is equipped on the Peña Blanca level with an ample capacity electric hoist and cage, operating in each case, with the exception of No 4, to the Lower 650 haulage level. Shaft Raise No. 4 serves from the Peña Blanca level to the Lower 400 only, and unless continued development on the Lower 400 Southwest veins opens up better ore than thus far found on that level, this shaft raise will not be connected to the Rosario haulage level.

Exploration Crosscuts and Raises Below the Upper 150 ft. Level
Lower 200 Salvador

With the object of cutting the downward extension of ore exposed on the Zero level in Blocks 73 and 74, a crosscut starting in Block 73 was driven 209 feet in a southwesterly direction. Veins were cut at approximately 85 feet and 115 feet, which permitted the exposure northwest and southeast on this horizon of some 600 feet of average grade ore and referred to subsequently in this report under Salvador Branch No. 4.

Lower 200 Southwest

Crosscuts north and south from the northeast end of the Southwest Main vein were driven from badly crushed and faulted ground in Block 65. Failing to find any better vein than the poor continuation of the Southwest, after driving 102 feet in the north crosscut and 97 feet in the south, the crosscuts were discontinued.

Lower 200 San Blas No. 2 Crosscut

This exploration crosscut, commenced in Block 79 to explore the territory between the Salvador and San Blas No. 1 vein, was advanced 127 feet in which some low grade quartz stringers were exposed. The crosscut lacks a further 130 feet to reach the San Blas No. 1 vein.

Lower 200 Esperanza-Jutiapa

As explained in the report of last year, this crosscut is being driven to explore this new and virgin territory from the Esperanza Ventilation Raise in Block 108. Work during the year shows an advance of 904 feet, with disappointing results. Driving of this crosscut will be continued in the same direction another 700 feet, in the hope of reaching more favorable geologic structure.

Lower 300 Rosario

The South Crosscut No. 80 from the Rosario vein in Block 22 was driven in this same direction an additional 70 feet and then turned westerly in Block 25 toward the Termopilas country. A total of 362 feet was driven, and the formation being favorable to ore occurrence, the crosscut is being continued.

The northwest crosscut, also from Block 22, was advanced 632 feet from the Rosario vein, over which area numerous oxidixed quartz stringers were encountered, none of which, however, appears sufficiently encouraging to warrant development. It is proposed to continue the crosscut about 400 feet to investigate the possibility of cutting the continuation eastward of the Nueva vein in this vicinity.

The downward continuity of the Culebra vein was cut 200 feet south of the Peña Blanca workings by the Lower 300 crosscut from the Rosario vein in Block 43, but 250 feet of drifting shows

values to be spotty and inconsistent, with badly faulted portions. The crosscut was driven 647 feet, and is being continued westerly in which direction it was turned in Block 46. Beyond the Culebra vein interesting stringers are being exposed. The crosscut will be continued to investigate the downward extension of the South San Miguel vein.

Lower 300 San Joaquin

This important exploration crosscut was advanced 442 feet; but at approximately 950 feet from its starting point in Block 63, a shale formation was entered which retarded work, due to the loose and somewhat heavy ground requiring timber. Efforts are being made to get through this shale bed, as it is now proposed to drive this crosscut 2,000 feet or more in a northeasterly course to investigate the possibilities of the untouched area to the north of the Crucero Gulch. Ventilation pipe and a blower are being installed to permit driving this crosscut double shift, commencing late in January.

From the western extremity of the San Joaquin vein on this level an additional exploration crosscut was started in Block 69 and driven 155 feet on a northwesterly strike. It is intended to continue this crosscut 1,000 feet to prove or disprove the ground to the west of the Upper 150 Crucero Crosscut.

Lower 300 Jucuara No. 2

Under this heading the report for 1939 states that it is planned to drive westward along the general strike of Jucuara No. 2 vein several hundred feet. Driving of this crosscut shows an advance of only 429 feet. The small footage achieved was due to extremely heavy flows of water encountered. The crosscut has now passed through these water courses and good progress is being made. Complete exploration of the relatively large territory west of Jucuara No. 2 will require some 3,000 feet of total crosscutting, half of which it is hoped will be completed this year.

Lower 300 Jucuara No. 1

An advance of 137 feet in the crosscut northeast from Jucuara No. 1 vein in Block 74 cut the northern extension of the Carmen vein. 30 feet beyond the vein the crosscut was stopped. The Carmen vein at this point is too poor to justify development.

Lower 300 San Benito No. 2

To explore the area intervening between the San Benito No. 2 and Santa Fe No. 1 vein a crosscut from the San Benito No. 2 in Block 91 was driven due north 153 feet. A further 40 feet of crosscutting is necessary to traverse this section, and should be terminated in January, 1941. There is, however, little hope of encountering anything of interest.

Lower 400 Aguacatal

With the driving of this crosscut a further 699 feet due south, the shale formation reported last year was passed through, and the face of the crosscut, temporarily stopped, shows an igneous rock structure more favorable for the occurrence of ore. This tunnel has been made suitable for water storage to assist peak load power periods during the dry season; but when conditions permit it is intended to continue it at least another 500 feet.

Lower 400 Santa Gertrudis

A southeasterly crosscut started in Block 71 from the footwall of the Southwest No. 1 vein was driven 216 feet to intersect the Santa Gertrudis vein at this horizon. The crosscut was driven 40 feet beyond the vein and stopped to permit development. 430 feet of drifting shows ore of below average grade, but with some pockety gold values.

Lower 400 Southwest

From Shaft Raise No. 4 in Block 71 a crosscut was driven 546 feet in a direction northeast, north and west, to cut the downward extensions of the main Southwest vein, Southwest No. 2, and Southwest No. 7. Drifting on the main Southwest vein amounted to only 30 feet to allow the more important work of the crosscut to be expedited. On the Southwest No. 2 drifting to the east reached 120 feet, showing an ill-defined vein carrying poor values. The crosscut turning west in Block 70 cut the Southwest vein No. 7 in Block 71, at which point the crosscut terminates. Low grade, but probable stoping ore, over a distance of approximately 120 feet, has been opened up on the Southwest vein No. 7 at this elevation.

Lower 400 San Benito No. 2

For the purpose of proving any continuation of the Santa Fe No. 2 vein beyond its faulted western extremity, and also to explore the territory towards the La Tigra Creek at this horizon, a crosscut was commenced in Block 96 from the western portion of the San Benito No. 2 vein and driven 299 feet in a southwesterly direction. Nothing of importance has been cut over this distance, but continued driving is contemplated.

Lower 500 Santa Fe No. 1

To determine the possibility of veins existing between the Santa Fe No. 1 and San Benito No. 2 veins, a crosscut was started near the western end of the Santa Fe No. 1 vein in Block 91 and advanced 141 feet toward the San Benito No. 2. Results over this distance have been disappointing; but the crosscut will be run to its objective, which requires 85 more feet to reach the San Benito No. 2.

Lower 650 Jucuara No. 2

It was decided during the year to ascertain if values occurring at intervals on this level persist at depth. The Jucuara No. 2 vein at this elevation is extremely blocky, and the accumulation of water from the upper reaches of the vein finds its outlet at this level. To avoid sinking on the vein, a crosscut was driven in Block 91 due south or in the hanging wall of the vein for a distance of 81 feet. A sinking and hoisting station for a 100 foot vertical winze was established, and sinking carried to a depth of 47 feet. When the 100 foot depth has been reached and pumping facilities provided, a new level, the Lower 750, will be established on the Jucuara No. 2 vein.

Exploration and Operating Crosscuts Above the Upper 150 ft. Level

Upper 450 Jucuara No. 1

To explore the territory between the Jucuara No. 1 and the Catalina veins, the crosscut from Jucuara No. 1 in Block 73 was advanced 650 feet. In Block 66 a narrow fissure was cut; but 100 feet of drifting on it showed values to be inconsistent. However, it warrants further investigation. The crosscut is being continued for 500 feet to cut any possible upward extension of the Catalina vein.

Upper 450 Porvenir-Culebra

Starting in Block 61 from the Porvenir vein, this crosscut, to explore the area intervening between the Porvenir and Culebra veins, was advanced 582 feet to the east. In the vicinity of Blocks 55 and 54, well defined but narrow stringers were intersected. 400 feet of additional driving will determine the possibilities in this territory.

Upper 150 Southwest

An operating cut-off crosscut 277 feet in length was driven in Blocks 69-70 on the Peña Blanca main haulage level. This cut-off crosscut was primarily driven to take the electric haulage and drainage away from the loose and soft Southwest vein being actually stoped below.

Upper 150 San Benito

In the General Exploration Plan for the year 1940 mention was made of a crosscut southeast from San Benito No. 1 to explore the territory between the San Benito and the old Upper 150 Salvador crosscut south. 674 feet of crosscutting started in Block 78, disclosed nothing of importance. The crosscut is being continued.

Upper 150 Guadalupe

An advance of 725 feet was made in this crosscut, commenced in Block 51. Results so far are disappointing; but to make certain regarding this area between the San Miguel and Colonia veins, continuation of the crosscut is intended.

From this same crosscut in Block 48 driving to the east was started and advanced 344 feet toward the Colonia vein, over which distance valueless oxidized stringers were exposed. 200 feet of crosscutting will reach the Colonia vein.

Upper 150 Veta No. 4 South

Paralleling the southeastern end of the Salvador vein, but some 700 feet to the northeast, a crosscut was started in Block 64 from Veta 4 South and driven 591 feet in a southeasterly direction to examine the area between the old Upper 150 South Salvador crosscut and the Porvenir Tunnel. Results to date are negligible; but should favorable rock structure persist, continuation of the crosscut is contemplated.

Upper 150 San Miguel-Culebra

A crosscut to expose the upward continuity from the Lower 300 level of the Culebra vein was driven 182 feet in a southeasterly direction from the South San Miguel Stringer in Block 50. A narrow but well defined vein was intersected in Block 49, and drifting to the south over a distance of 130 feet shows ore of commercial grade. Development in this area is being energetically followed by drifting and raising to prove further the extent of this southern portion of the Culebra vein.

It is believed this vein will during 1941 contribute a moderate tonnage of fair grade ore to the reserves.

General Exploration Plan for the Year 1941

To locate possible ore bodies in the area left unexplored, an energetic exploration program is proposed for the year 1941.

In addition to the crosscuts summarized below, it is intended to explore the extensive and virgin area in the southwestern portion of the Escobales Zone and the northeastern section of the Aurora Zone. The work of crosscutting in this territory will be started early in the year.

1. Continuation of the crosscut from Block 63 of the Lower 300 San Joaquin to explore the virgin ground north of the Crucero Gulch.
2. Active driving of the crosscut west from the Lower 300 Jucuara No. 2 vein commenced in Block 98.
3. Prolongation of the crosscut southeast from the eastern end of the Upper 150 San Benito vein commenced in Block 78.

4. To advance the crosscut from the Esperanza raise in Block 108 on the Lower 200 level, so long as the formation and general indications remain encouraging.
5. Continuation of the crosscut southeast started in Block 64 in the vicinity of the Veta 4 South on the Upper 150 level.
6. Further driving of the crosscut southwest commenced in Block 96 from the western portion of the Lower 400 San Benito No. 2 vein.
7. As conditions permit, to complete other crosscuts including Lower 200 San Blas No. 2, Lower 300 Rosario northwest and westerly crosscuts started in Block 22, Upper 450 Jucuara No. 1, Upper 450 Porvenir-Culebra and Upper 150 Guadalupe crosscuts.

VEIN DEVELOPMENT AND STOPING

Veins Worked in 1940

Ore production during the year was obtained from 28 veins of which 13 contributed from development only. The year 1940 shows a record of 184,728 tons delivered to the mill. 82% of this came from the Jucuara No. 1 and No. 2, Southwest No. 1, Salvador, Santa Fe No. 1 and No. 2, San Benito No. 2 and Carmen veins. The Independencia, Jucuara No. 3 and No. 4, San Blas No. 2, San Benito No. 1, Santa Fe Main, Sante Fe No. 3, Southwest No. 2, No. 3, No. 4, No. 5, No. 6, and No. 7, Santa Gertrudis, Termopilas, Veta 4 South, Northwest, San Joaquin, Culebra and Rosario veins supplied the remaining 18%.

Salvador Group

Salvador Vein

Active development on what is known as Salvador Branch No. 4 on the Upper 150, Zero, Lower 200 and Lower 300 levels, between Blocks 71 and 75, resulted in an increase in the Active Reserves of low grade ore in the Salvador vein. This Branch No. 4 runs parallel and southwest to the main vein, joining it on the Lower 200 and 300 levels in Block 71. On the whole, assays show values to be erratic; but stoping from the Lower 400 level is showing ore of better grade than might be expected from sampling results. Tonnage produced shows 17,061, of which 46% was obtained from development sources. An unbroken reserve of 58,276 tons of 16 ounces silver and .04 ounce gold per ton is shown. Development of this vein is nearly complete and little more can be expected.

Jucuara No. 1-Fortuna Vein

Previous reports state that the field for development on this vein is limited. Ore extracted shows 28,408 tons, making it the

third largest producer for the year. 27,172 tons came from stopes. 121,344 tons of 26 ounces silver per ton remains in the Active Ore list.

Carmen Vein

Steady stoping produced 7,152 tons, development yielding 466 tons. A total tonnage of 7,618 was extracted from this vein during 1940. It will be worked on the same moderate scale in the coming year slowly to deplete the reserve of 17,756 tons of fair grade ore.

Independencia Group

Independencia Vein

3,879 tons were extracted, nearly all from stoping, only 122 tons coming from development. A small reserve of 4,954 tons of average grade exists which will be steadily depleted during 1941.

San Blas No. 2

Development in the upper reaches of this ore body shows a small increase of low grade ore in the Active Reserve, from 17,886 tons to 20,903.

Production amounted to 2,317 tons, 35% being from development.

Santa Fe Group

San Benito No. 1 Vein

Work during 1940 was confined to stoping in the vicinity of the Lower 300 level, and with the extraction of 3,562 tons from this area there is now left only a small reserve of 3,305 tons of good gold grade above the Upper 150 level. The finding of any additional extensive ore bodies within the limits of the San Benito No. 1 vein cannot be expected, and it is possible that the remaining small reserve will be mined during the year 1941.

San Benito No. 2 Vein

The policy of mining silver and gold in proportion to that shown by the reserves was adhered to during 1940 in so far as practicable, and partly to achieve this, stoping in the San Benito No. 2 vein shows a decided increase over last year. Of the 8,084 tons of ore produced, 1,887 tons were from development operations. Drifting to the west, beyond the faulted portion of this vein at the Lower 400 elevation, the continuation of this vein was discovered. Results of 70 feet of sampling, commencing at 330 feet west of the fault in Blocks 98-99, proved to be distinctly encouraging, retaining the good gold values typical of the San Benito

No. 2 vein. Raises have already been started to ascertain the upward continunity of this ore. The limited development does not justify reserve additions in this particular section; but the probability of developing new ore on this vein is now considerably brighter than heretofore. Intensive development at the Lower 450 and Lower 500 horizons exposed ore more than sufficient to offset that mined, so that the reserve of 28,408 tons of 26 ounces silver and 0.29 ounce gold per ton may be viewed with satisfaction.

Santa Fe, No. 1 Vein

Tonnage amounting to 9,538 was extracted from the Santa Fe No. 1. 7,619 tons from stopes now leaves an unbroken reserve of 37,944 tons carrying above average gold value. Stoping on an equivalent basis is intended for the coming year.

Santa Fe No. 2 Vein

As planned, stoping operations in the Santa Fe No. 2 were increased, showing 11,239 tons extracted, with only 912 tons from development. 53,934 tons of excellent ore remain.

Santa Fe No. 3 Vein

Of the 4,354 tons mined, 4,217 tons were derived from stopes. This vein will be worked on the same scale in 1941. It shows a small existing reserve of 9,103 tons of 29 ounces silver and 0.33 ounce gold per ton.

Jucuara Group

Jucuara No. 2 Vein

As explained elsewhere in this report, sinking below the Lower 650 level is in progress to determine if values persist in depth below this horizon. Prospects of developing new ore are considered fair, but it is not expected that the blocked out reserve of 132,493 tons of 21 ounces silver and 0.24 ounce gold per ton will be materially increased by these operations. The proposed Lower 750 ft. level will facilitate removal of ore blocked out below the Lower 650. From the Jucuara No. 2 vein, 35,127 tons were mined, thus making it the greatest single producer of the year. Stoping yielded the bulk of the tonnage or 97%.

Jucuara No. 3 Vein

A small tonnage of 210 mined from below the Lower 300 level does not change the reserve shown for 1939.

Jucuara No. 4 Vein

Production yielded 3,268 tons, of which 2,455 tons were realized from stopes. An unbroken reserve of 16,701 tons is shown.

Culebra Vein

This vein, not worked since the year 1931, was exposed beyond the southern known extremity of this ore body, by crosscutting, as explained under exploration crosscuts, on the Upper 150 and Lower 300 levels.

The vein on the Lower 300 horizon, as previously mentioned, is narrow, with erratic values in a badly faulted zone. On the Upper 150 level, however, the vein, although narrow, is well defined, with consistent above-average grade values. Development on, below, and above this level is being expedited where the possibility of adding to the unbroken reserve is considered encouraging. Although 887 tons were obtained from development, sufficient raising has not been executed to permit additions to the active ore list at this time.

Old Mine Group

Southwest No. 1 Vein

The heavy ground opened up on this vein by development makes it imperative to follow development closely by stoping so that the drifts may be abandoned as soon as possible. Therefore, heavy stoping on this vein during 1940 caused a considerable depletion of the better grade ore, leaving an unbroken reserve of low grade ore of 32,669 tons of 15 ounces silver and .08 ounce gold per ton. Drifting on the Lower 400 level to the northeast remains to be carried out, but results to date are not encouraging; and with development areas in other levels almost exhausted, any material increase in the unbroken reserve cannot be expected. With the extraction of 34,722 tons, 31,903 from stoping and 2,819 from development, the Southwest No. 1 vein was the second largest producer for the year. Stoping operations are still being actively pursued.

Southwest No. 2 Vein

Concentration on drifting and raising fully to exploit the possibilities of this ore body yielded 4,562 tons from development. Work on the Lower 400 level and raises therefrom prove that the ore does not extend below the Lower 300 horizon. Development on the Zero level continues with the exposure of ore containing good gold values. This vein will in all probability be fully developed during 1941, as it is known that it joins the Southwest No. 1 vein between the Zero and Upper 150 levels. Subsequently in this report reference is made to a new ore body, named Southwest No. 6. This vein, parallel to and in close proximity to the Southwest No. 2 vein, was previously included with the Southwest No. 2 vein, but development indicates that the two veins are distinct and separate from each other. This explains why the unbroken reserve of the Southwest No. 2 shows a slight decrease from that of 1939, now containing 18,798 tons of 13 ounces silver and .08 ounce gold per ton.

Southwest No. 3 Vein

Development yielded 44 tons from this small ore body located some 30 feet southeast of and roughly parallel to the Southwest No. 1 vein. Otherwise work on this vein was negligible and the reserve is the same as that of last year.

Southwest No. 4 Vein

The extraction of 610 tons from development leaves this ore body relatively unchanged. A moderate stoping program is outlined for 1941.

Southwest No. 5 Vein

This new small ore body, named as above to distinguish it from other veins in close proximity, is a branch of the Southwest No. 1 vein in Block 73 on the Zero level, and strikes slightly north of east. It joins the Santa Gertrudis in Block 72, giving it a lateral distance of approximately 150 feet. Inability to locate the downward extension on the Lower 200 elevation by crosscutting does not allow a calculated reserve to be included. This vein provided 422 tons from development.

Southwest No. 6 Vein

This new ore body of limited extent is an offshoot from Southwest No. 2 vein and was previously referred to under that heading. Drifts and raises produced 504 tons of average grade ore, and results of this development permit the inclusion of 5,322 tons of 31 ounces silver and .09 ounce gold per ton in the Active Reserve list. This ore body is not expected to be a large producer.

Southwest No. 7 Vein

This proved to be a narrow vein with erratic gold values, striking north and at right angles to the Southwest veins. Vigorous development of drifts and raises gave 1,424 tons from this source and makes an appreciable addition to the reserves, totalling 9,864 tons of 19 ounces silver and .15 ounce gold per ton.

Southwest Veins—General

Notwithstanding the 31,903 tons stoped from the Southwest vein No. 1, the Southwest Group, due to the steady development policy maintained during the year, shows 1,566,531 ounces silver and 7,633 ounces gold in reserve. Any material additions in the Southwest No. 1, No. 2, No. 3 and No. 4 veins are not looked for, as the lateral extremities are generally well defined. New ore bodies in this group, such as Southwest No. 5 and No. 6 veins, are small but similar to other veins in the Southwest in that all appear to be offshoots from the Main Southwest vein No. 1, with

the exception of Southwest vein No. 7. Development continues, particularly on the No. 7 vein, where prospects of exposing further ore of fair grade are encouraging.

Termopilas Vein

Persistent drifting and raising during the year allow an increase in the reserve, now totaling 7,959 tons of 13 ounces silver and 0.13 ounce gold per ton. Production amounted to 2,089 tons, the bulk, or 1,996 tons, derived from development. Stoping on a small scale is proposed for the coming year.

Santa Gertrudis Vein

This vein contributed 2,302 tons, all from development. In the course of drifting and raising on the Lower 300 level, interesting, although somewhat erratic, gold values were exposed. This work, with raises from the lower 400 horizon, brought about a satisfactory increase of 7,123 tons in its reserve of slightly better grade, which now appears as 28,963 tons of 15 ounces silver and 0.10 ounce gold per ton. A small area to the south on the lower levels remains to be developed, but the Santa Gertrudis is unlikely to be a big producer.

Other Veins

614 tons were obtained from old fills, together with 971 tons from the San Joaquin, Northwest, Veta No. 4 South, Santa Fe Main and Rosario veins.

General Outlook

Until new veins are discovered the best possibilities of adding to existing ore reserves lie in the Culebra and San Benito No. 2 veins. It can hardly be expected, however, that development in existing veins will add to the reserves at even the same rate as obtained during 1940. Depletion of reserves, unless new veins are found, can therefore be expected during 1941. On the other hand, it is hoped that the extensive exploration program proposed will find new ore deposits during the year that will stem the present trend of declining reserves.

THE MILL

Notwithstanding the record tonnage handled by the mill during 1940, a marked improvement in recovery was effected, amounting to 1.38% in silver and 1.29% in gold.

The mill on the whole is in good condition and no major replacements are contemplated, with the exception of one new solution tank to be erected during 1941.

Tonnage Crushed

	1940	1939
Total Wet Tons received	200,925.82	196,075.43
Average per cent of moisture	8.0618	8.7861
Total Dry Tons milled	184,600	178,900
Average Tons milled per day (366 days 1940 —365 days 1939)	504	490
Average Tons milled per day full running time	527	511
Average Tons milled per day per 1,850 Lb. Stamps	26.4	25.6
Number of 1,850 Lb. Stamps	20	20
Total Tons treated by Mill to December 31, 1940	3,501,708	3,317,108

Recovery

Average ounces silver received per ton	23.0419	25.4986
Total ounces silver produced	4,253,538	4,561,705
Average ounces silver recovered per ton	21.1222	23.0234
Total ounces silver recovered	3,899,164	4,118,887
Average silver recovery, per cent	91.6687	90.2927
Average ounces gold received per ton	.13389	.10808
Total ounces gold produced	24,716	19,336
Average ounces gold recovered per ton	.12553	.09994
Total ounces gold recovered	23,173	17,880
Average gold recovery per cent	93.7575	92.4705

Treatment Period Detail

	1940			1939		
	Hrs. Min.	Ag. %	Au. %	Hrs. Min.	Ag. %	Au. %
Extraction by Crushing Solution	9 00	38.22	78.06	9 00	36.30	75.63
Extraction by Agitation	69 41	54.07	16.82	75 05	54.67	18.18
Extraction in Slimes Presses		.81	.78	1 05	1.00	1.15
		93.10	95.66	85 10	91.97	94.96
Less Dissolved Value Loss		1.43	1.90		1.68	2.49
Recovery		91.67	93.76		90.29	92.47
Per Cent Sand not passing 150 Mesh		24.70			23.41	

Comparative Statement

On Consumption of Mill Supplies

	1940					1939				
	Amount Consumed	Total Cost U. S. Cy.	Cost Per Unit	Cost Per Ton Crushed (Tons) 184,600	Cost Per Fine Oz. Bullion Produced (Ounces) 3,922,337.73	Amount Consumed	Total Cost U. S. Cy.	Cost Per Unit	Cost Per Ton Crushed (Tons) 178,900	Cost Per Fine Oz. Bullion Produced (Ounces) 4,136,767.09
Cyanide (100% KCN)	765,471 lbs.	$ 91,042.56	$.1189	$.4932	$.0232	836,604 lbs.	$101,090.16	$.1208	$.5651	$.0244
Sulphur	270,125 "	10,565.63	.0391	.0572	.0027	257,500 "	10,516.91	.0408	.0588	.0025
Zinc Dust	140,153 "	18,564.20	.1325	.1006	.0047	146,981 "	17,734.60	.1207	.0991	.0043
Muriatic Acid	14,995 "	2,232.98	.1489	.0121	.0006	14,835 "	2,573.22	.1735	.0144	.0006
72" Filter Canvas	4,951 yds.	3,852.25	.7781	.0209	.0010	4,445½ yds.	3,197.54	.7193	.0179	.0008
Lime	3,184,330 lbs.	22,875.88	.0072	.1239	.0058	3,235,149 lbs.	23,124.78	.0071	.1293	.0056
Powdered Borax	7,300 "	429.27	.0588	.0023	.0001	1,400 "	80.97	.0578	.0004	....
Borax Glass	....	....	....	....	....	4,300 "	842.45	.1959	.0047	.0002
Soda	1,568 "	90.04	.0574	.0005	....	1,120 "	65.01	.0580	.0004	....
Fuel Oil	5,911 gals	1,066.40	.1804	.0058	.0003	6,683 gals.	1,274.74	.1907	.0071	.0003
Steel Balls	287,383 lbs.	13,265.25	.0462	.0718	.0034	291,868 lbs.	13,156.39	.0451	.0735	.0032
Crusher & Battery Liners, Shoes & Dies	32,932 "	3,111.95	.0945	.0169	.0008	37,565 "	3,516.80	.0936	.0196	.0009
Tube Mill and Ball Mill Liners	73,116 "	9,586.51	.1311	.0519	.0024	113,049 "	13,000.16	.1150	.0727	.0032
		$176,682.92		$.9571	$.0450		$190,173.73		$1.0630	$.0460

POWER

Rainfall	1940	1939
Total rainfall, inches	57.83	40.89
Number of rainy days	183	177
Greatest monthly rainfall, inches	12.14 (Sept.)	8.09 (Sept.)
Lowest monthly rainfall, inches	.15 (Feb.)	.10 (April)
Greatest single rainfall, inches	2.02 (June)	1.77 (Sept.)

POWER DISTRIBUTION

	1940		1939	
	Kilowatt Hours	K.W. Hrs. Per Ton	Kilowatt Hours	K.W. Hrs. Per Ton
Mine Power	2,610,330	14.140	2,395,460	13.390
Electric Haulage	206,190	1.117	181,190	1.013
Blacksmithing	43,870	.238	36,400	.204
Mine Lights	64,040	.347	61,570	.344
Hoisting	24,940	.135	23,070	.129
Mill Power	6,011,685	32.566	5,896,490	32.960
Mill Lights	58,330	.316	63,240	.353
Surface Lights	537,410	2.911	528,716	2.955
Surface Power	34,815	.189	33,424	.187
Machine Shop	83,400	.452	93,830	.524
Laboratory	18,580	.101	24,100	.135
Sand	7,840	.042		
Totals	9,701,430	52.554	9,337,490	52.194

Power Production by:	1940		1939	
	Kilowatt Hours	Per Cent	Kilowatt Hours	Per Cent
San Juancito Plant	3,890,300	40.10	4,294,460	45.99
Guadalupe Plant	3,252,830	33.53	2,909,630	31.16
Aguacatal Plant	1,169,900	12.06	903,900	9.68
Diesel Plant	1,388,400	14.31	1,229,500	13.17
Totals	9,701,430	100.00	9,337,490	100.00

COST OF POWER PRODUCTION

1940

	Hydro.		*Diesel*		*Total*	
	Amount U.S. Cy.	Cost per K.W.Hr.	Amount U.S. Cy.	Cost per K.W.Hr.	Amount U.S. Cy.	Cost per K.W.Hr.
Labor	$11,751.98	.0014137	$ 3,351.60	.0024140	$15,103.58	.0015568
Supplies	4,544.77	.0005467	23,699.48	.0170696	28,244.25	.0029114
Total	$16,296.75	.0019604	$27,051.08	.0194836	$43,347.83	.0044682

1939

	Hydro.		*Diesel*		*Total*	
	Amount U.S. Cy.	Cost per K.W.Hr.	Amount U.S. Cy.	Cost per K.W.Hr.	Amount U.S. Cy.	Cost per K.W.Hr.
Labor	$11,514.49	.0014201	$ 2,534.74	.0020616	$14,049.23	.0015046
Supplies	5,422.98	.0006689	20,698.13	.0168346	26,121.11	.0027974
Total	$16,937.47	.0020890	$23,232.87	.0188962	$40,170.34	.0043020

Based on Horsepower Generated:	1940	1939
Horsepower Hours	12,999,916	12,516,743
Cost per Horsepower Hour	$ 0.003334	$ 0.003209
Cost per Horsepower Year	29.28998	28.11084
Cost per Horsepower Year—Increase	1.17914	

POWER

Although the rainfall during 1940 was greater than during the previous year, but little additional benefit was derived during the first six months when the demands on the Diesel plant were even greater than during the year 1939. The good rains during the latter part of the year should carry well into 1941 and make this dry season shorter than that of 1940.

As proposed in last year's report, the entire penstock for the San Juancito Power Plant was replaced with a new and much larger pipe line. A new 625 KVA generator was also installed in the San Juancito Power House to give added efficiency to this plant during the dry season when only enough water to run the new unit is available. It is believed that the addition of the new penstock and new unit will materially decrease power costs in 1941.

EXPANSION

The option mentioned in last year's report, as taken on San Andrés Mine, near Santa Rosa de Copán, Honduras, was relinquished early in the year. Expenditures on this property during 1939 and 1940 amounted to $42,234.31. Although a fair tonnage of low grade ore was indicated, it was deemed insufficient to warrant putting the property into production.

Expenditures on the mercury property which we had under option amounted to only $3,166.18. A small amount of development proved it to be unattractive.

CONCLUSION

Operating results for the year must be considered satisfactory, with the exception of the vital item of ore reserves which has suffered the first material drop in several years, but still remains better than in any year previous to 1935.

The proposed increased exploration program for 1941, approved by the Board of Directors, will, we hope, disclose new ore bodies further to lengthen the life of the property.

The helpful cooperation and advice of the Officers and Board of Directors is gratefully acknowledged, and this opportunity is taken to express to all the members of the staff our sincere appreciation for the very satisfactory operating results obtained during the year under review.

Respectfully submitted,

K. H. MATHESON,
General Manager.

Annex "A"—Active Ore Reserves

ESTIMATED RESERVES (13 and 14 cu. ft. per ton)	Average Width Feet			Tons of Ore Plus Waste	Av. Troy ounces Per Ton		Total Troy ounces	
Veins	Vein	Waste	Stope		Ag.	Au.	Ag.	Au.
Independencia Group								
Independencia	1.75	1.78	3.53	4,954	23	.04	113,387	213
San Blas No. 2	0.99	1.82	2.81	20,903	10	.07	206,224	1,388
Salvador Group								
Salvador	1.90	1.55	3.45	58,276	16	.04	922,962	2,320
Jucuara No. 1 (Fortuna)	2.30	1.69	3.99	121,344	26	.06	3,148,905	7,388
Fortuna—North	1.87	1.49	3.36	2,630	21	.04	54,769	105
Fortuna Vein	2.05	1.45	3.50	4,819	14	.03	67,967	162
Carmen	2.34	1.74	4.08	17,756	19	.03	339,268	610
Jucuara Group								
Jucuara No. 2	2.77	2.55	5.32	132,493	21	.24	2,813,542	32,410
Jucuara No. 3	1.73	2.11	3.84	10,204	12	.26	118,166	2,625
Jucuara No. 4	2.43	1.38	3.81	16,701	28	.09	461,285	1,421
Jucuara No. 5	2.60	1.90	4.50	2,160	14	.10	31,200	212
Santa Fe Group								
Santa Fe No. 1	1.98	1.62	3.60	37,944	21	.15	803,690	5,643
Santa Fe No. 2	2.79	2.58	5.37	53,934	46	.45	2,496,570	24,117
Santa Fe No. 3	2.33	1.67	4.00	9,103	29	.33	263,137	2,975
San Benito No. 1	0.66	2.34	3.00	3,305	15	.21	49,916	697
San Benito No. 2	1.60	1.43	3.03	28,408	26	.29	741,886	8,246
Old Mine Group								
San Joaquin	1.00	2.00	3.00	3,538	19	.28	68,717	987
Colonia	1.01	2.08	3.09	8,980	15	.13	130,939	1,169
Colonia No. 2	1.38	1.62	3.00	1,602	11	.10	17,541	163
Capitana	0.81	2.19	3.00	2,285	3	.28	6,664	639
Southwest No. 1	2.96	1.97	4.93	32,669	15	.08	506,147	2,535
Southwest No. 2	2.23	1.71	3.94	18,798	13	.08	246,047	1,575
Southwest No. 3	1.47	3.03	4.50	14,459	14	.03	207,130	473
Southwest No. 4	1.56	2.94	4.50	10,579	24	.10	254,455	1,044
Southwest No. 6	2.00	0.50	2.50	5,322	31	.09	166,248	484
Southwest No. 7	1.41	1.09	2.50	9,864	19	.15	186,504	1,522
Termopilas	1.64	1.59	3.23	7,959	13	.13	106,474	1,000
Other Veins								
Veta No. 4 South	1.43	1.57	3.00	22,467	20	.03	447,046	692
Santa Gertrudis	1.42	1.60	3.02	28,963	15	.10	437,209	2,953
TOTALS				692,419	22.26	.1528	15,413,995	105,768

Broken Ore in Stopes

BROKEN ORE RESERVE (20.5 cu. ft. per ton)

Veins	
Independencia	1,490
Salvador	7,051
Jucuara No. 1 (Fortuna)	19,246
Fortuna	1,391
Jucuara No. 2	2,892
Santa Fe No. 1	7,450
Santa Fe No. 2	1,790
Santa Fe No. 3	4,392
San Benito No. 1	933
San Benito No. 2	3,126
Termopilas	332
Mine Storage Chutes	1,763
Mill Ore Bin	559
TOTAL	52,415

SUMMARY—ACTIVE RESERVES

Estimated Ore at 13 and 14 cu. ft. per ton	692,419	22.26	.1528	15,413,995	105,768
Broken Ore Reserves at 20.5 cu. ft. per ton	52,415	23.00	.1250	1,205,545	6,552
Total Active Reserves as of Jan. 1, 1941	744,834	22.31	.1508	16,619,540	112,320

Note: While it is inherently probable that the tonnages and grades when actually mined from these individual veins will vary somewhat, up or down, from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

Annex "B"—Inactive Ore Reserves

ESTIMATED RESERVES (13 cu. ft. per ton) Veins	Tons of ore plus waste	Av. Troy Ozs. per ton Ag.	Au.	Total Troy ounces Ag.	Au.
Esperanza (South San Miguel Extension South)	5,450	14	.04	76,300	218
Porvenir	2,088	13	.03	27,189	53
Nuevo	8,450	9	.11	76,050	929
Veta No. 4 North	4,166	11	.03	45,780	126
Total Inactive Reserves as of Jan. 1, 1941	20,154	11	.07	225,319	1,326

Annex "C"

Veins and Groups	Drifts	Cross-cuts	Raises	Total Feet
Independencia Group				
Independencia	...	...	123	123
San Blas No. 2	250	127	385	762
Salvador Group				
Salvador	2,994	701	1,993	5,688
Jucuara No. 1 (Fortuna)	455	858	164	1,477
Fortuna	12	...	...	12
Carmen	450	252	403	1,105
Jucuara Group				
Jucuara No. 2	170	580	445	1,195
Jucuara No. 4	...	...	327	327
Santa Fe Group				
Santa Fe Main Vein	178	...	205	383
Santa Fe No. 1	526	328	356	1,210
Santa Fe No. 2	293	63	283	639
Santa Fe No. 3	50	...	6	56
San Benito No. 1	...	689	...	689
San Benito No. 2	1,426	674	256	2,356
Old Mine Group				
Southwest No. 1	1,395	1,937	878	4,210
Southwest No. 2	1,035	450	1,355	2,840
Southwest No. 4	66	...	284	350
Southwest No. 5	111	...	117	228
Southwest No. 6	156	...	248	404
Southwest No. 7	988	158	399	1,545
Culebra	419	309	169	897
Termopilas	680	101	628	1,409
Rosario	75	1,824	7	1,906
San Joaquin	477	645	12	1,134
Guadalupe	30	1,100	...	1,130
Northwest	312	69	113	494
Other Veins				
Santa Gertrudis No. 1	1,057	126	615	1,798
Veta No. 4 South	250	591	20	861
Porvenir	...	594	116	710
Santa Elena Group				
Zopilotera	...	23	...	23
Crosscuts				
Lower 400 Aguacatal Crosscut	...	752	17	769
Lower 200 Jutiapa Crosscut	...	904	...	904
Waste Pass No. 37	...	...	82	82
Shaft Raises				
Shaft No. 6	...	...	47	47
TOTALS	13,855	13,855	10,053	37,763

Annex "D"

ORE PRODUCTION

From Stoping Operations:

Veins	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Independencia Group													
Independencia	347	116	102	195	493	910	208	150	284	466	279	207	3,757
San Blas No. 2	328	148	123	29	180	265	76	49	...	15	30	256	1,499
Salvador Group													
Salvador	732	768	1,408	661	869	887	775	558	353	475	683	1,073	9,242
Jucuara (Fortuna)	3,062	3,683	4,234	1,961	1,120	2,192	2,407	1,065	1,746	1,341	660	2,828	26,299
Fortuna	...	...	...	...	...	...	294	3	...	555	...	21	873
Carmen	710	517	699	762	1,008	806	758	407	396	437	328	324	7,152
Jucuara Group													
Jucuara No. 2.....	2,751	2,550	2,456	2,392	2,643	2,650	3,045	3,732	2,687	2,127	3,400	3,797	34,230
Jucuara No. 3.....	7	...	...	5	9	45	12	8	45	20	8	51	210
Jucuara No. 4.....	108	41	16	15	...	...	57	273	228	185	737	795	2,455
Santa Fe Group													
Santa Fe No. 1.....	1,054	538	602	927	819	888	485	598	456	478	343	431	7,619
Santa Fe No. 2.....	1,327	448	950	974	1,230	337	262	357	1,126	2,095	1,150	983	11,239
Santa Fe No. 3.....	169	163	269	526	365	349	388	418	251	431	668	220	4,217
San Benito No. 1.....	230	248	...	...	2	969	739	46	...	473	545	302	3,554
San Benito No. 2.....	366	407	336	647	401	297	987	648	950	427	417	314	6,197
Old Mine Group													
Southwest No. 1.....	773	1,520	2,216	2,886	2,933	2,439	2,846	3,715	3,340	3,566	3,233	2,436	31,903
Termopilas	...	...	...	...	...	...	...	...	...	...	...	93	93
Old Fills	...	79	15	...	210	70	83	64	38	30	...	25	614
STOPING TOTALS ...	11,964	11,226	13,426	11,980	12,282	13,104	13,422	12,091	11,900	13,121	12,481	14,156	151,153

From Development Operations:

Veins	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Independencia Group													
Independencia	...	...	...	...	...	...	...	...	...	...	54	68	122
San Blas No. 2	336	150	...	...	50	52	57	74	23	...	60	16	818
Salvador Group													
Salvador	545	222	89	148	187	242	732	1,588	1,399	1,255	1,215	197	7,819
Jucuara No. 1 (Fortuna)	101	138	...	...	...	...	103	312	201	270	35	29	1,189
Fortuna	...	...	...	...	...	...	47	...	...	...	...	...	47
Carmen	75	185	17	44	...	66	59	...	...	...	20	...	466
Jucuara Group													
Jucuara No. 2	40	...	...	137	126	76	22	14	21	73	264	124	897
Jucuara No. 4	...	...	...	...	...	14	65	179	423	132	...	...	813
Santa Fe Group													
Santa Fe Main Vein	...	...	...	...	...	...	...	...	7	115	48	42	212
Santa Fe No. 1	210	190	216	204	34	322	4	193	465	54	...	27	1,919
Santa Fe No. 2	54	44	11	95	84	70	136	321	23	35	28	11	912
Santa Fe No. 3	96	40	1	...	...	...	...	...	...	...	...	...	137
San Benito No. 1	...	...	...	...	...	...	...	...	8	...	...	...	8
San Benito No. 2	48	129	132	182	209	237	5	4	116	148	351	326	1,887
Old Mine Group													
Southwest No. 1	274	467	381	703	229	217	61	23	23	291	134	16	2,819
Southwest No. 2	697	741	753	918	740	316	131	49	...	11	93	113	4,562
Southwest No. 3	26	18	...	...	...	...	...	...	...	...	...	...	44
Southwest No. 4	127	93	35	77	139	137	2	...	...	...	...	...	610
Southwest No. 5	...	251	171	...	...	...	...	...	...	...	...	...	422
Southwest No. 6	...	...	...	33	157	138	83	61	12	...	20	...	504
Southwest No. 7	...	...	...	...	82	7	62	107	374	319	281	192	1,424
Termopilas	480	361	534	365	92	40	95	...	...	...	...	29	1,996
Rosario	...	...	...	...	...	...	...	...	...	...	...	33	33
San Joaquin	...	...	...	...	...	11	...	...	...	...	...	...	11
Culebra	...	...	...	...	...	...	...	220	156	1	116	394	887
Northwest	...	172	63	193	57	...	...	75	46	...	...	...	606
Miscellaneous Group													
Veta No. 4 South	39	...	...	70	...	...	...	...	...	...	...	...	109
Santa Gertrudis	252	294	...	22	140	166	385	516	70	96	136	225	2,302
DEVELOPMENT TOTALS	3,400	3,495	2,403	3,191	2,326	2,111	2,049	3,736	3,367	2,800	2,855	1,842	33,575
STOPING TOTALS	11,964	11,226	13,426	11,980	12,282	13,104	13,422	12,091	11,900	13,121	12,481	14,156	151,153
GRAND TOTALS	15,364	14,721	15,829	15,171	14,608	15,215	15,471	15,827	15,267	15,921	15,336	15,998	184,728

Annex "E"

TONNAGE MINED

From October 1, 1907, to January 1, 1941

Veins	Total including Stoping, Devel. & Filling Oct. 1, 1907 to Dec. 31, 1939	Total including Stoping Devel. and Filling For Year 1940	Grand Total including Stoping, Devel. & Filling January 1, 1941
Buena Ventura	98,490	.....	98,490
Candelaria Group	166,573	.....	166,573
Capitana	60,967	.....	60,967
Carmen No. 1	34,748	7,618	42,366
Carmen No. 2	1,105	.....	1,105
Catalina	6,587	.....	6,587
Colonia No. 1	61,582	.....	61,582
Colonia No. 2	665	.....	665
Concepcion	19,170	.....	19,170
Crisanta	7,410	.....	7,410
Culebra	106,245	887	107,132
Esperanza	8,710	.....	8,710
Fortuna Group	101,062	920	101,982
Guadalupe	61,177	.....	61,177
Independencia	290,023	3,879	293,902
Jucuara No. 1 (Fortuna)	240,809	27,488	268,297
Jucuara No. 2	128,182	35,127	163,309
Jucuara No. 3	39,186	210	39,396
Jucuara No. 4	22,461	3,268	25,729
Jucuara No. 5	1,901	.....	1,901
56 Fault Vein	4,954	.....	4,954
North	4,647	.....	4,647
Northwest	89,378	606	89,984
Nueva	28,147	.....	28,147
Porvenir	2,985	.....	2,985
Rosario	150,949	33	150,982
Salvador	624,293	17,061	641,354
San Benito No. 1	113,513	3,562	117,075
San Benito No. 2	16,475	8,084	24,559
San Blas No. 1	6,938	.....	6,938
San Blas No. 2	10,634	2,317	12,951
San Joaquin	71,621	11	71,632
San Luis	2,389	.....	2,389
San Miguel North	174,801	.....	174,801
San Miguel Group	125,855	.....	125,855
Santa Fe Main Vein	189,395	212	189,607
Santa Fe No. 1	24,086	9,538	33,624
Santa Fe No. 2	60,284	12,151	72,435
Santa Fe No. 3	37,364	4,354	41,718
Santa Gertrudis No. 1	35,082	2,302	37,384
Santa Gertrudis No. 2	1,753	.....	1,753
Socorro	22,592	.....	22,592
Southwest No. 1	36,192	34,722	70,914
Southwest No. 2	1,418	4,562	5,980
Southwest No. 3	1,622	44	1,666
Southwest No. 4	1,446	610	2,056
Southwest No. 5	.....	422	422
Southwest No. 6	.....	504	504
Southwest No. 7	.....	1,424	1,424
Termopilas	1,734	2,089	3,823
West	97,005	.....	97,005
Veta No. 4 North	11,010	.....	11,010
Veta No. 4 South	7,534	109	7,643
Ore from Development	63,599	.....	63,599
Miscellaneous	6,474	614	7,088
TOTALS	3,483,222	184,728	3,667,950

Summary to Annex "E"

From October 1, 1907, to January 1, 1941

From Stoping	2,838,919
From Development	591,922
From Fills	237,109
TOTAL	3,667,950

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NEW YORK and HONDURAS ROSARIO MINING COMPANY



61ST SIXTY-FIRST ANNUAL REPORT

NINETEEN HUNDRED AND FORTY-ONE

1941

REPORT of the
NEW YORK and HONDURAS
ROSARIO MINING COMPANY

NEW YORK

JANUARY 1, 1942

OFFICERS

WM. A. PRENDERGAST, *President*
LEWIS L. CLARKE, *Chairman of Board*
H. A. GUESS, *Vice-President*
W. C. LANGLEY, *Treasurer*
J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

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WM. A. PRENDERGAST
M. F. SOTO
AMBROSE G. TODD
RICHARD H. VALENTINE

EXECUTIVE COMMITTEE

LEWIS L. CLARKE, *Chairman*
H. A. GUESS
DR. J. RALPH JACOBY
M. F. SOTO
AMBROSE G. TODD

WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

PRESIDENT'S REPORT

February 26, 1942.

To the Stockholders of the
New York and Honduras Rosario Mining Company:

This, the Sixty-first Annual Report, is issued under conditions which have never heretofore been faced by our beloved country. The immediate future will bring to all of our people problems and possible privations which must be met with willingness and courage. For more than sixty years the life and history of this Company have been closely associated with our Sister Republic of Honduras, C. A. It is gratifying to realize that, in the present world tragedy, we are as one with the Government and people of Honduras in this titanic struggle for human liberty. We congratulate His Excellency, President Tiburcio Carias A., on the valiant stand he and his Government and people have taken with our own nation in defense of manhood rights. We renew our expressions of appreciation to them for the cordial relations which have prevailed between us for more than half a century.

General Manager's Report

We ask your earnest consideration of the report of our General Manager, Mr. K. H. Matheson (Pages 17 to 38). The report gives in detail the work done during the year 1941. The subject of "Mine Reserves" is treated fully. (Pages 19, 34 and 35).

Status of Silver

The daily press and financial journals have given during the past few months timely information regarding a greatly increased use of silver in industry and for defense purposes. There is now evidence of a general market for silver, the possible extent of which cannot be predicted at this time; nor is it possible now to indicate the effect that this enhanced demand for the metal may have upon the market price; but the present trade tendencies indicate that the effect should be a beneficial one.

Taxation

The Federal Income Tax upon our business during the year 1941 was 31%. The necessarily great expenditures being made and to be made by our Government will require a further increase in taxes. The nature of the changes that may be made in

the present tax law, and the new rates to be imposed, will not be known for some time. It should be understood, however, that they will adversely affect the earnings of our Company.

Probable Earnings for 1942

In the last Annual Report we gave you an estimate of the probable earnings for 1941, of $2.315 per share. That estimate was based upon the existing Federal Income Tax of 24%. Subsequently the tax was increased to 31% applicable to the year 1941. Had we known of this increase at the time the report was issued, we should have used the appropriate higher rate, which would have indicated earnings for 1941 of $2.229 per share. The actual earnings were $2.705 per share.

The best estimate for the year 1942 it is possible to make at this time, giving due consideration to the grade of ore to be used and probable production costs, is $1.946. However, increased Federal Income Taxes will reduce this estimate.

Expansion

During the year 1941 we have investigated a large number of properties. In the General Manager's Report (Page 33) there is given our experience wtih certain properties that have been or are now under option.

Treasury Stock

From April 21st to December 29th, 1941, we have acquired in the "open market" 2535 shares of our Company stock, at a price (including all expenses) of $14.69 per share, or $37,245.53.

Neptune Gold Mining Company

In accordance with our custom, a copy of the Annual Report of this Company will be mailed to you promptly. Interest on the Debentures ($570,267.57) held by us has been paid to June 30, 1941, and interest to December 31, 1941, will be paid on March 2nd prox.

General Financial and Statistical Matters

A comparative "Statement of Operations" for the years 1941 and 1940 (Page 8) gives in ample detail the essential statistics of our Operations.

The profit realized for the year 1941, after deducting all charges, was $502,686.67, equal to $2.705 per share.

There was paid in dividends from Earnings for the year 1941, $446,407.20, equal to $2.375 per share, compared with $593,356.05, or $3.15 per share in 1940.

Our Income from Investments and sundry items in 1941 was $107,324.70, compared with $96,148.63 in 1940.

We had Marketable Securities on December 31, 1941, which cost $1,480,818.61, and the market value of which was $1,313,-799.37, a difference between cost and market of $167,019.24, or 11-28/100%.

The difference between cost and market value of securities held on December 31, 1940, was 11 1/10%.

There is submitted with this report and made a part hereof:

1. A Comparative Statement of Operations for the years 1941 and 1940;
2. A Comparative Income and Profit and Loss Statement for the years ended December 31, 1941 and December 31, 1940;
3. A Balance Sheet for the year ended December 31, 1941;
   (The form of balance sheet has been changed to correspond with the form used in submitting annual reports to governmental agencies.)
4. A Statement of the Surplus Account for the year ended December 31, 1941;
5. A List of the Securities held by this Company December 31, 1941;
6. A Table showing Bullion Production and Dividend Distribution to Stockholders, from the organization of the Company, including all the dividends paid from the earnings of the year 1941.

Respectfully submitted,

WM. A. PRENDERGAST,

President

Comparative Statement of Operations
For the Years 1941 and 1940

	Year 1941	Year 1940	Increase Decrease*
Total sales value of Gold and Silver recovered	$2,019,045.28	$2,175,173.15	$156,127.87*
Tons of ore milled	186,600	184,600	2,000
Ounces of Silver recovered	3,486,548.62	3,892,770.01	406,221.39*
Number of ounces of Silver recovered per ton of ore	18.68461	21.08759	2.40298*
Sales value of Silver recovered	$1,220,292.15	$1,365,019.70	$144,727.55*
Average sales value of Silver per ounce	$ .35000	$ .35065	$ .00065*
Average cost of Silver per ounce**	$ .18166	$ .16006	$ .02160
Average profit on Silver per ounce**	$ .16834	$ .19059	$ .02225*
Average sales value of Silver recovered per ton of ore	$ 6.53961	$ 7.39447	$ .85486*
Average cost of Silver per ton of ore**	$ 3.39434	$ 3.37522	$ .01912
Average profit on Silver recovered per ton of ore**	$ 3.14527	$.. 4.01925	$ .87398*
Ounces of gold recovered	22,821.519	23,147.241	325.722 *
Number of ounces of Gold recovered per ton of ore.	.12230	.12539	.00309*
Sales value of Gold recovered	$ 798,753.13	$ 810,153.45	$ 11,400.32 *
Average sales value of Gold per ounce	$ 35.00	$ 35.00	$ .....
Value of Gold recovered per ton of ore	$ 4.28056	$ 4.38869	$ .10813*
Number of bars of Bullion shipped from mine	2,029	2,306	277 *

** After credit for sales value of gold recovered.

Income and Profit and Loss Statement

For the Years Ended December 31, 1941, and December 31, 1940

	Year 1941	Year 1940	Increase Decrease*
Production of Gold and Silver	$2,019,045.28	$2,175,173.15	$156,127.87*
Less freight and other expenses on bullion	96,393.90	103,158.01	6,764.11*
OPERATING INCOME	$1,922,651.38	$2,072,015.14	$149,363.76*
Operating expenses	1,247,411.62	1,242,155.33	5,256.29
MINE OPERATING PROFIT	$ 675,239.76	$ 829,859.81	$154,620.05*
New York administrative and general expenses	88,331.46	87,906.43	425.03
NET OPERATING PROFIT	$ 586,908.30	$ 741,953.38	$155,045.08*
Add income from investments, etc. (Note A)	107,324.70	96,148.63	11,176.07
	$ 694,233.00	$ 838,102.01	$143,869.01*
Less other deductions from income (Note B)	60.506.10	68,111.13	7,605.03*
PROFIT BEFORE TAXES ON INCOME AND PROVISION FOR DEPLETION	$ 633,726.90	$ 769,990.88	$136,263.98*
Taxes on income—estimated (Note C):			
Provision for the year:			
Federal normal income tax and surtax	74,487.49	104,762.44	30,274.95*
Government of Honduras	21,120.27	.....	21,120.27
Total taxes	$ 95,607.76	$ 104,762.44	$ 9,154.68*
	$ 538,119.14	$ 665,228.44	$127,109.30*
Appropriated for depletion from earnings (Note D)	35,432.47	31,654.50	3,777.97
	$ 502,686.67	$ 633,573.94	$130,887.27*
Reserve for contingencies appropriated from earnings per resolution of Board of Directors	.....	25,000.00	25,000.00*
NET PROFIT	$ 502,686.67	$ 608,573.94	$105,887.27*

NOTE A—Figures for 1940 reclassified for comparative purposes to accord with method followed in treating gains and losses on securities in 1941 audit. The items in loss on investments sold under Note B show the excess of capital losses over capital gains.

NOTE B—Other deductions from income include:

Investigations of outside properties	$ 27,366.12	$ 41,126.80	$ 13,760.68*
Federal capital stock tax, New York State franchise tax and New York City gross receipts tax	10,051.38	9,466.25	585.13
Loss on investments sold	17,770.23	10,594.81	7,175.42
Obsolete inventory written off	3,331.03	3,604.24	273.21*
Business association dues, subscriptions and donations	1,410.00	910.00	500.00
Moving expenses	.....	1,398.19	1,398.19*
Sundry	577.34	1,010.84	433.50*
	$ 60,506.10	$ 68,111.13	$ 7,605.03*

NOTE C—No provision is required for federal excess profits tax.

NOTE D—Beginning with the year 1932, depletion has been taken in tax returns on a percentage basis in accordance with respective revenue acts. Entries recording depletion as they affect the older portion of the property are carried in the general accounts. Depletion deductions on ore mined from the newer discoveries, which newer discoveries are not carried on the books, are made for income tax purposes only.

BALANCE
DECEMBER

ASSETS

Current Assets			
Cash		$ 139,640.53	
Bullion at smelters and in transit—less allowance for expenses		262,543.13	
Marketable securities—at cost:			
United States Government bonds	$ 520,000.00		
Municipal bonds	174,742.06		
Public Authority bonds	103,882.67		
Domestic Corporation bonds	311,753.75		
Domestic Corporation stocks	370,440.13		
	$1,480,818.61		
Less reserve to reduce to aggregate quoted market prices	167,019.24		
	$1,313,799.37		
Interest accrued on bonds	5,700.81	1,319,500.18	
United States Treasury notes—tax series B—1943, purchased for payment of Federal income taxes		75,120.00	
Broken ore in stopes and mill bins—at cost		201,032.34	
Inventories—materials and supplies—at cost		388,696.74	$2,386,532.92
Investments and Other Assets			
Neptune Gold Mining Company, ten-year 5% income debenture notes, due March 1, 1948, principal amount $570,267.57, and 5,100 shares of its capital stock of no par value—at cost		$ 570,267.57	
Sundry accounts receivable		3,957.03	574,224.60
Prepaid Items, Etc.			
Advance to Government of Honduras to apply against income taxes for the years 1941 to 1960 inclusive	$ 250,000.00		
Less amount applicable for the year 1941—estimated	21,120.27	$ 228,879.73	
Inventories of supplies, prepaid insurance, taxes and other expenses		140,035.61	368,915.34
Buildings, Machinery and Equipment			
At cost		$2,319,342.23	
Less allowance for depreciation		1,870,933.34	448,408.89
Mines, Real Estate and Concessions			
At valuation originally established in 1880		$1,500,000.00	
Less allowance for depletion applicable thereto		1,172,930.11	327,069.89
Total assets, exclusive of 1916 adjustment to mine valuation			$4,105,151.64
Adjustment to Mine Valuation			
As of December 31, 1916		$1,500,000.00	
Less allowance for depletion applicable thereto		1,172,930.10	
Unamortized amount (per contra)			327,069.90
Total assets, including 1916 adjustment to mine valuation			$4,432,221.54

SHEET
31, 1941

LIABILITIES

Current Liabilities

Drafts payable	$ 16,655.32	
Accounts payable	59,040.62	
Accrued taxes	6,451.25	
Federal taxes on income of the year ended December 31, 1941—estimated	74,487.49	$ 156,634.68
Reserve for Contingencies		25,000.00

Capital Stock and Surplus

Capital stock (par value $10.00 per share):		
Authorized and issued—188,367 shares	$1,883,670.00	
Less in treasury — 2,535 shares	25,350.00	
Outstanding 185,832 shares	$1,858,320.00	
Earned surplus	2,065,196.96	3,923,516.96
Total liabilities, reserve, capital stock and earned surplus, exclusive of surplus from appreciation of mines		$4,105,151.64
Surplus from 1916 *Appreciation of Mines*	$1,500,000.00	
Less depletion applicable thereto written off to December 31, 1941	1,172,930.10	
Balance at December 31, 1941 (per contra)		327,069.90
		$4,432,221.54

Surplus

Year Ended December 31, 1941

EARNED SURPLUS

Balance at January 1, 1941		$1,901,779.99
ADDITIONS		
Net profit for the year		502,686.67
Adjustment to transfer from earned surplus that portion of depletion provisions charged thereto in 1913-1916 applicable to surplus from appreciation of mines for those years		151,282.87
		$2,555,749.53
DEDUCTIONS		
Dividends paid, totaling $2.375 per share:		
March 29, 1941—$.50 per share	$ 94,183.50	
June 28, 1941— .625 per share	117,574.58	
Sept. 27, 1941— .625 per share	117,574.58	
Dec. 27, 1941— .625 per share	117,074.54	$446,407.20
Provision to reduce book value of marketable securities to aggregate quoted market prices at December 31, 1941		32,249.84
Excess of cost over par value of 2,535 shares of Company's capital stock purchased during year		11,895.53
		490,552.57
		$2,065,196.96

SURPLUS FROM APPRECIATION OF MINES

Balance at January 1, 1941		$513,785.24
DEDUCTIONS		
Allowance for depletion on appreciation of mine valuation applicable to 1941 poduction	$ 35,432.47	
Depletion provisions of 1913-916 applicable to surplus from appreciation of mines, heretofore charged to earned surplus	151,282.87	186,715.34
Balance at December 31, 1941		327,069.90
Total surplus at December 31, 1941		$2,392,266.86

Marketable Securities

December 31, 1941

	Par Value	Market Value	
Bonds			
United States Government			
Treasury bonds:			
2% due December 15, 1955-1951	$ 55,000.00	$ 55,034.37	
2¼% due June 15, 1956-1954	135,000.00	141,750.00	
2½% due March 15, 1958-1956	80,000.00	81,950.00	
2½% due September 15, 1972-1967	200,000.00	200,000.00	
Savings bonds, 2½% Defense Series "G" due May 1, 1953	50,000.00	49,400.00	
New York City Bonds			
3% Corporate Stock for Transit Unification, Series R-31, due June 1, 1980	175,000.00	180,906.25	
Port of New York Authority			
3% General and Refunding bonds, Sixth Series due December 1, 1975	50,000.00	49,375.00	
Triborough Bridge Authority			
3¼% Sinking Fund Revenue Bonds due February 1, 1980	50,000.00	48,500.00	$806,915.62
Domestic Railroad Bonds			
Chicago and North Western Railway Co., 1st and Ref. Mtge. 4½% Gold Bonds, due May 1, 2037	25,000.00	$ 3,500.00	
The Chicago, Rock Island and Pacific Railway Co. 1st and Reg. Mtge. 4% Gold Bonds, due April 1, 1934	50,000.00	4,625.00	
New Orleans, Texas and Mexico Railway Co. 1st Mtge. 5½% Gold Bonds Series "A" due April 1, 1954	25,000.00	9,312.50	
New York, Chicago and St. Louis R.R. Co. Ref. Mtge. Series "C" 4½% Gold Bonds due Sept. 1, 1978	50,000.00	31,375.00	
St. Louis-San Francisco Railway Co. Prior Lien Mtge. 5% Gold Bonds, Series "B" due July 1, 1950	50,000.00	5,750.00	54,562.50
Domestic Public Utility Bonds			
Electric Power and Light Corp, 5% Gold Debentures due February 1, 2030	50,000.00	$ 45,500.00	
Joplin Water Works Co. 1st Mtge. 5% Gold Bonds, Series "A" due March 1, 1957	25,000.00	26,250.00	
Mississippi Power and Light Co. 1st Mtge. 5% Gold Bonds due December 1, 1957	50,000.00	51,750.00	
National Power and Light Co. 5% Gold Debentures, Series "B" due May 1, 2030	13,000.00	13,910.00	137,410.00
(FORWARD)			$998,888.12

Marketable Securties—Continued

(FORWARD)			$998,888.12
	Number of Shares	Market Value	
Stocks			
American Chicle Co., common stock, no par	1,000	$ 90,500.00	
Arkansas Power and Light Co. $6.00 cumulative preferred stock, no par	500	38,000.00	
The Commonwealth and Southen Corp. $6.00 cumulative preferred stock, no par	550	22,687.50	
Florida Power and Light Co. $7.00 cumulative preferred stock, no par	500	51,250.00	
The Home Insurance Co., capital stock par value $5.00 per share	621	16,311.25	
Iowa Southern Utilities Company of Delaware:			
Common stock, par value $15.00 per share	2,100	3,412.50	
Dividend arrears certificate on 500 shares of 7% cumulative preferred stock		5,500.00	
Jersey Central Power and Light Co. 5½% cumulative preferred stock, par value $100.000 per share	500	37,750.00	
Public Service Co. of Indiana:			
5% cumulative preferred stock Series "A", par value $100.00 per share	500	44,750.00	
Common stock, no par	500	4,750.00	314,911.25
Total market value at December 31, 1941			$1,313,799.37
United States Treasury Notes—Tax Series B—1943 Purchased for payment of Federal Income Taxes			$ 75,120.00
Other Investments (at cost)			
Neptune Gold Mining Company ten year 5% income debenture notes due March 1, 1948, principal amount $570,267.57 and 5,100 shares of its capital stock of no par value			$ 570,267.57

Report of Auditors

New York and Honduras Rosario Mining Company

We have examined the balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY as of December 31, 1941, and the statements of profit and loss and surplus for the year then ended, have reviewed the system of internal control and the accounting procedures of the Company, including minutes of stockholders' and directors' meetings, and have examined or tested accounting records of the Company and other supporting evidence at its offices in New York and in Honduras, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary.

Cash, securities and bullion were verified by actual count, inspection of documents and by direct communication with custodian or depositaries. Provision for depletion and depreciation charged to income, as in the past, represents the maximum amount allowable under federal revenue acts applicable to properties carried on the books.

In our opinion, the accompanying balance sheet and related statements of profit and loss and surplus present fairly the position of NEW YORK AND HONDURAS ROSARIO MINING COMPANY at December 31, 1941 and the results of its operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST.

New York, N. Y.
February 21, 1942.

Table Showing

Bullion Production		Distribution to Stockholders		
1882	$2,452.27	1887 No. 1	$ 37,500— 2½%	($ .25 per share) Dividend
1883	12,900.42	1888 Nos. 2 to 8	112,500— 7½%	(.75 per share) Dividend
1884	149,741.39	1889 Nos. 9 to 14	97,500— 6½%	(.65 per share) Dividend
1885	244,444.70			
1886	224,157.58	1891 Nos. 15 to 17	45,000— 3%	(.30 per share) Dividend
1887	613,446.05	1892 Nos. 18 to 22	187,500—12½%	(1.25 per share) Dividend
1888	767,632.15	1893 Nos. 23 to 26	150,000—10%	(1.00 per share) Dividend
1889	590,189.55			
1890	113.28	1896 Nos. 27 to 30	60,000— 4%	(.40 per share) Dividend
1891	369,587.19	1897 Nos. 31 to 42	180,000—12%	(1.20 per share) Dividend
1892	614,498.67	1898 Nos. 43 to 50	120,000— 8%	(.80 per share) Dividend
1893	492,534.87	1899 Nos. 51 to 63	195,000—13%	(1.30 per share) Dividend
1894	392,485.92	1900 Nos. 64 to 78	255,000—17%	(1.70 per share) Dividend
1895	158,164.42	1901 Nos. 79 to 95	255,000—17%	(1.70 per share) Dividend
1896	449,525.88	1902 Nos. 96 to 100	75,000— 5%	(.50 per share) Dividend
1897	568,872.06	1903 No. 101	15,000— 1%	(.10 per share) Dividend
1898	611,467.76	1904 Nos. 102 to 110	135,000— 9%	(.90 per share) Dividend
1899	798,994.77	1905 Nos. 111 to 124	195,000—13%	(1.30 per share) Dividend
1900	827,443.12	1906 Nos. 125 to 142	285,000—19%	(1.90 per share) Dividend
1901	780,760.18	1907 Nos. 143 to 155	195,000—13%	(1.30 per share) Dividend
1902	490,273.34	1908 Nos. 156 to 167	180,000—12%	(1.20 per share) Dividend
1903	436,818.29	1909 Nos. 168 to 175	120,000— 8%	(.80 per share) Dividend
1904	721,374.87	1910 Nos. 176 to 181	120,000— 8%	(.80 per share) Dividend
1905	993,065.39	1911 No. 182	45,000— 3%	(.30 per share) Dividend
1906	1,112,171.69	1912 Nos. 183 to 184	70,000— 3½%	(.35 per share) Dividend
1907	791,347.62			
1908	788,910.23	1913 Nos. 185 to 189	220,000—11%	(1.10 per share) Dividend
1909—10 months	636,500.00	1914 Nos. 190 to 194	260,000—13%	(1.30 per share) Dividend
1910	890,700.00	1915 Nos. 195 to 199	280,000—14%	(1.40 per share) Dividend
1911	887,169.59	1916 Nos. 200 to 207	400,000—20%	(2.00 per share) Dividend
1912	944,212.67			
1912-13—12 months	1,051,273.28	1917 Nos. 208 to 212	260,000—13%	(1.30 per share) Dividend
1913—last 3 months	328,100.05	1917 Nos. 1 and 2	* 140,000— 7%	(.70 per share) Dividend
1914	1,239,877.13	1918 Nos. 213 to 216	200,000—10%	(1.00 per share) Dividend
1915	1,191,760.70	1918 Nos. 3 to 6	* 200,000—10%	(1.00 per share) Dividend
1916	1,553,114.86	1919 Nos. 217 to 220	200,000—10%	(1.00 per share) Dividend
1917	1,674,193.80	1919 Nos. 7 to 10	* 200,000—10%	(1.00 per share) Dividend
1918	1,803,751.79	1920 Nos. 221 to 226	320,000—16%	(1.60 per share) Dividend
1919	2,115,158.25	1920 No. 11	* 40,000— 2%	(.20 per share) Dividend
1920	1,568,612.32			
1921	466,956.02	1922 Nos. 227 to 230	200,000—10%	(1.00 per share) Dividend
1922	1,066,732.57	1923 Nos. 231 to 235	250,000—12½%	(1.25 per share) Dividend
1923	1,421,911.15	1924 Nos. 236 to 241	350,000—17½%	(1.75 per share) Dividend
1924	1,584,610.32	1925 Nos. 242 to 249	400,000—20%	(2.00 per share) Dividend
1925	1,763,023.16	1926 Nos. 250 to 257	400,000—20%	(2.00 per share) Dividend
1926	1,601,429.35			
1927	1,341,300.06	1927 Nos. 258 to 265	400,000—20%	(2.00 per share) Dividend
1928	1,500,233.98	1928 Nos. 266 to 274	450,000—22½%	(2.25 per share) Dividend
1929	1,477,710.79	1929 Nos. 275 to 283	500,000—25%	(2.50 per share) Dividend
1930	1,315,821.38	1930 Nos. 284 to 290	371,677—18¾%	(1.87½ per share) Dividend
1931	1,403,104.20	1931 Nos. 291 to 297	364,159—18¾%	(1.87½ per share) Dividend
1932	1,355,117.43	1932 Nos. 298 to 303	283.874—15%	(1.50 per share) Dividend
1933	1,910,740.17	1933 Nos. 304 to 312	659,324—35%	(3.50 per share) Dividend
1934	1,965,520.68	1934 Nos. 313 to 321	753,468—40%	(4.00 per share) Dividend
1935	2,109,313.47	1935 Nos. 322 to 330	800,559—42½%	(4.25 per share) Dividend
1936	2,037,208.11	1936 Nos. 331 to 337	734,632—39%	(3.90 per share) Dividend
1937	2,203,125.13	1937 Nos. 338 to 341	833,525—44¼%	(4.425 per share) Dividend
1938	2,144,214.86	1938 Nos. 342 to 345	734,631—39%	($3.90 per share) Dividend
1939	2,313,920.24	1939 Nos. 346 to 349	800,560—42½%	(4.25 per share) Dividend
1940	2,175,173.15	1940 Nos. 350 to 353	593,356—31½%	(3.15 per share) Dividend
1941	2,019,045.28	1941 Nos. 354 to 357	446,407—23¾%	(2.375 per share) Dividend
	$65,064,009.60		$16,176,173	

Dividends 1 to 182, inclusive, were paid on Capital Stock of $1,500,000.00

Dividends 183 to 284, inclusive, were paid on Capital Stock of 2,000,000.00

*Dividends Nos. 1 to 11, inclusive, were paid on Capital Stock of 2,000,000.00

Dividends 285 to 357, inclusive were paid on outstanding capital stock.

GENERAL MANAGER'S REPORT

San Juancito, Honduras, C. A., January 1, 1942.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company:

A resumé of the 1941 operations and comparative statistical data are incorporated in the following Annual Report.

Production

	1941	1940
Dry Tons Treated	186,600	184,600
Average per ton—Troy ounces silver milled	20.3234	23.0419
Average per ton—Troy ounces gold milled	.13040	.13389
Total Troy ounces silver milled	3,792,355	4,253,538
Total Troy ounces gold milled	24,333	24,716
Total Troy ounces silver produced	3,488,677	3,899,164
Total Troy ounces gold produced	22,828	23,173
Average per ton—Troy ounces silver produced	18.6960	21.122
Average per ton—Troy ounces gold produced	.12234	.12553
Ratio of gold to silver	1:153	1:168
Bars of Doré Bullion	2,029	2,306
Bullion Fineness of Silver	967.015	962.222
Bullion Fineness of Gold	6.328	5.719
Custom Ore & Bullion—Not included above:		
Troy ounces silver	54.74	....
Troy ounces gold	142.728	10.289

Honduras Operating Costs in U. S. Currency

	YEAR 1941	Total Cost	YEAR 1940	Total Cost	Cost Per Ton 1941	Cost Per Ton 1940	Cost Per Ounce of Silver 1941	Cost Per Ounce of Silver 1940
MINING								
Labor	$406,725.20		$370,926.45					
Supplies	273,772.37		259,170.90					
Power	10,017.27		12,695.12					
Depreciation	10,104.35		9,441.14					
ORE MINED AND MILLED								
First of Year	$207,637.38		$227,255.39					
Last of Year	201,032.34	6,605.04 $707,224.23	207,637.38	19,618.01 $671,851.62	$3.79	$3.64	$.2028	$.1726
MILLING								
Labor	$ 79,062.50		$ 77,014.52					
Supplies	199,404.98		211,419.49					
Power	18,868.98		27,624.09					
Depreciation	49,138.39	346,474.85	46,630.02	362,688.12	1.85	1.96	.0994	.0932
ADMINISTRATION								
Labor	$146,451.33		$156,074.12					
Supplies	32,703.87		36,652.21					
Depreciation	14,557.34	193,712.54	14,889.26	207,615.59	1.04	1.12	.0556	.0533
		$1,247,411.62		$1,242,155.33	$6.68	$6.72	$.3578	$.3191
Credit for Gold		798,753.13		810,153.45	4.28	4.38	.2291	.2081
Net Cost of Silver		$448,658.49		$432,001.88	$2.40	$2.34	$.1287	$.1110

Average Number of Men Employed

1,199 men were employed per working day as against 1,142 in 1940.

THE MINE

Ore Reserves

The detail of the Ore Reserves, summarized below as of January 1, 1942, is shown in Annex "A":

Comparative Summary—Active Ore Reserves

Based on Silver at 35 *cents and Gold at* $35.00 *per Troy Oz.*

	Tons of Ore plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1942	747,283	21.29	.1579	15,907,903	118,020
January 1, 1941	744,834	22.31	.1508	16,619,540	112,320
Increase	2,449		.0071		5,700
Decrease		1.02		711,637	

Comparative Summary—Inactive Ore Reserves

	Tons of Ore plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1942	26,651	11.00	.08	292,130	2,204
January 1, 1941	20,154	11.00	.07	225,319	1,326
Increase	6,497		.01	66,811	878

Increases in the Active Reserves may be noted in tonnage, ounces gold, and in gold value per ton.

The small reduction in total ounces silver as well as silver content per ton can be largely attributed to the conservative policy adopted of mining no higher grade ore from reserves than the general average, and to the opening up of new ore in the Colonia, Culebra, and Jucuara veins.

Although the condition of ore reserves at the end of the year can be considered reasonably satisfactory in comparison with the rather drastic drop the previous year, the field for substantial new additions is materially reduced.

Ore Production

Annex "D", showing detail of ore production, is summarized below, and comparison made with former years.

	1941	1940	1939	1938
From Stoping (Tons)	152,874	151,153	147,281	120,094
From Development (Tons)	33,687	33,575	31,567	34,407
Total Tons	186,561	184,728	178,848	154,501

Ore from development, 18.1%, compared favorably with 1940 and was of somewhat better grade.

Development and Operating Connections

Summary of Annex "C"

Year	Drifts	Crosscuts	Raises	Winzes	Total Feet
1941	15,069	14,516	10,118	59	39,762
1940	13,855	13,855	10,006	47	37,763
Increase	1,214	661	112	12	1,999

Operating Crosscuts and Raises Below the Peña Blanca Level

Work in the Culebra section exposed a fair tonnage of low grade ore in the Culebra No. 2 vein, and indications are that considerable new ore will also be opened on the Culebra No. 1. To facilitate mining these veins and branches, a material-handling raise known as Shaft Raise No. 7 was started on the Lower 300 in Block 49, and driven to the Upper 150 level. Station cutting on the different levels, together with the timbering of the shaft, is under way, and this material-handling raise should be in operation early in 1942.

The vertical winze below the Lower 650 Jucuara No. 2, mentioned in last year's report as having been started to allow a Lower 750 level to be established, was completed to that level early in the year and is known as Shaft Raise No. 6. It permitted some 430 feet of drifting on the Lower 750 Jucuara No. 2 vein, together with a raise to the Lower 650 level. Inasmuch as good ore has been encountered on the lower level, it is planned during 1942 to continue the working winze to the Lower 850 level to facilitate deeper development and stoping.

Exposure of good grade ore in the Colonia vein indicated the necessity of a new shaft raise which will be known as No. 8. It will operate between the Lower 400 and Upper 150 levels in Block 43. Operating crosscuts on three levels have already been commenced, and the completion of this new shaft raise No. 8 may be expected in 1942, thus assisting in the economical subsequent working of the Colonia stopes below the Peña Blanca level.

176 feet of operating crosscuts were completed in the immediate vicinity of the ore and waste passes serving the Southwest territory, thus giving much needed access to the ore and waste storage from two sides.

Crosscuts and Raises Below the Upper 150 ft. Level Zero Southwest

A crosscut 236 feet in length was commenced in Block 62 and driven parallel to the Southwest vein and in the footwall thereof, in an easterly direction. At the intersection of Blocks 59 and 60, an extension of the North San Miguel, south of the

Southwest vein, was cut. Drifting on this vein north and south for a total distance of 550 feet, proved that values are so far not consistent.

Lower 200 Jucuara No. 1

The northerly crosscut from Jucuara No. 1 vein in Block 82, started in 1939, to cut any possible easterly extension of the Jucuara No. 2 vein, was continued and at 190 feet from the Jucuara No. 1 a narrow vein of fair grade ore was encountered. Drifting to the east opened up a narrow vein over a distance of some 120 feet with consistent but moderate values.

Lower 200 San Blas No. 2

This crosscut, commenced in Block 79 to investigate the territory between the Salvador vein and the Independencia some 500 feet west of the Esperanza Crosscut, was advanced 324 feet, passing over the end of a similar crosscut on the Lower 300 level from the Independencia. The San Blas No. 1 was cut 500 feet from the Salvador, but showed no improvement over other levels above and development of it is not warranted.

Lower 200 Esperanza-Jutiapa

This crosscut, fully explained in previous reports, was driven 424 feet during the year through loose and heavy ground distinctly unfavorable for ore occurrence. This persistent unfavorable condition over the distance driven caused the crosscut to be terminated early in the year. The completion of this crosscut, together with the Lower 400 Esperanza and the Upper 150 Aguacatal, definitely proves the large territory south of the Aguacatal Creek and major fault to be a soft deep-seated porphyry without fractures, and entirely distinct from the ore bearing andesite to the north of the Aguacatal fault.

Lower 300 Rosario

Crosscut No. 80, turned westerly in Block 25 toward the Termopilas country, was driven 515 feet during the year, of which 65 feet was a branch north. The ground traversed by this crosscut shows stringers or veins to be non-existent.

From Block 22 the northwest crosscut No. 79 was driven 294 feet, and in Block 29 a narrow vein was cut, referred to as Rosario No. 2. Drifting on it at this elevation, together with raises and the establishing of a Lower 200 level, exposes fair gold values which, however, are not consistent. Insufficient development prevents the inclusion of the Rosario No. 2 in the Active Reserve.

Crosscut No. 83 was continued in a westerly direction from Block 46, 434 feet to the apparent extension downward of the South San Miguel Vein. No values are evident where the vein was intersected; but there will be some development when Shaft Raise No. 7 is in operation.

Lower 300 San Joaquin

This crosscut No. 78 was advanced 1,066 feet. The shale formation exposed in the year previous persisted until the crosscut entered what appears to be volcanic ash about 150 feet from the present face, in which formation any reasonable expectation of encountering ore bodies may be discounted.

The additional crosscut from the western extremity of the San Joaquin vein shows 371 feet of advance for the year. This crosscut also entered unfavorable ground similar to that encountered in Crosscut No. 78 and was stopped for the same reason.

Lower Jucuara No. 2

Under this heading in the report of 1940 it was stated that the complete exploration of the relatively large territory west of Jucuara No. 2 would require some 3,000 feet of crosscutting. Such exploration has now been abandoned, due to 683 feet of crosscutting during 1941 traversing a metamorphic rock and finally ending in sedimentaries where the existence of ore bodies cannot be expected. Before this territory was finally relinquished, crosscuts to the north and south were commenced from Blocks 98 and 101 respectively, in search of any possible lateral extension of the Jucuara No. 2 vein. The crosscut to the north was driven 166 feet and that to the south 150 feet. Nothing of interest was encountered and all exploration has been definitely abandoned.

Lower 300 Southwest No. 7

A crosscut was commenced in Block 72 and driven 318 feet in a northwesterly direction. Only stringers of small interest have been cut; but this crosscut will be continued and branch crosscuts at right angles will be driven fully to develop the ground outlined between the Upper 150 West and the Lower 300 Southwest San Joaquin crosscuts.

Lower 400 San Benito No. 2

This crosscut towards La Tigra Creek was advanced 460 feet, and on entering shale formation was discontinued.

Lower 400 Aguacatal

328 feet of advance in this crosscut again entered a shale formation and passed under the ridge, when it was decided to stop all work in this section and use the tunnel for water storage, to assist peak load power periods during the dry season.

Lower 400 Jucuara No. 2

In the year 1936 a crosscut was started in a northerly direction from the Jucuara No. 2 vein in Block 88, to determine if any ore bodies existed in the territory north of the No. 56 Fault. Continuation of this crosscut shows an advance of 372 feet

through favorable ground in which well defined stringers have been exposed; but drifting on these on a small scale proves them to be of low grade. Approximately 170 feet of drifting from this crosscut to the west on the No. 56 Fault vein exposed spotty values of too low grade to permit of an addition to the Active Reserve.

Lower 400 San Benito No. 1

In Block 80 and parallel to the San Benito a crosscut was started in an easterly direction with the object of cutting the San Benito vein beyond a known caved and stoped portion. After 146 feet of crosscutting, the vein was again intersected late in the year. Drifting and raising opened up ore carrying the good gold content typical of the San Benito, and permits an addition to the reserve of 1,615 tons averaging 28 ounces silver and .20 ounce gold per ton.

Lower 650 Santa Fe No. 1

From the western end of the Santa Fe No. 1, in Block 75, a crosscut was commenced and advanced 336 feet in a southwesterly direction to disclose any ore bodies that might exist between the Santa Fe No. 1 and San Benito No. 2 veins; but also with the main object of cutting any downward extension of the good ore exposed in the vicinity of Block 98 in the San Benito No. 2, on the Lower 500 level. Quartz stringers were exposed over the interval of 336 feet of crosscutting, but of low grade, and it is doubtful if further development is warranted. The crosscut lacks some 50 feet to cut the San Benito No. 2 vein should it extend to the Lower 650 horizon.

Lower 650 Southwest-Santa Gertrudis

For the purpose of developing the Southwest and Santa Gertrudis veins on the Lower 500 level by means of a raise from the Lower 650 level, a crosscut in Block 69 was started and driven 204 feet in a southwesterly direction. A raise to the Lower 500 level permitted drifting at that elevation on what is believed to be the Santa Gertrudis vein; but 180 feet driven exposed only poor values. Work on this level is being continued to locate the bottom of the ore existing on the level above.

Operating Crosscuts
Above the Upper 150 Level
Upper 450 Jucuara No. 1

Commenced in Block 73 from the Jucuara No. 1, this crosscut, by an additional 47 feet driven, was concluded on reaching the extension upward of the Catalina vein. Drifting north on the vein at this level gave encouraging results over a distance of 150 feet, a well defined vein, above average grade in silver. Continued development, however, revealed by drifting and raising that

these good values occur over only a comparatively small area. Crosscutting to the north, east and west, totalling some 570 feet, failed to locate any extension of the vein. A small tonnage of average grade ore has been included in the reserves.

Upper 450 Porvenir-Culebra

In Block 50, this crosscut, after being driven an additional 331 feet, broke into the old Culebra workings. Stringers intersected throughout the driving of this crosscut, from the starting point in Block 61, warrant further investigation.

Upper 350 Jucuara No. 1—Carmen

From Block 72 in the Jucuara No. 1 a crosscut northeast was commenced and driven 294 feet to cut any possible extensions of the Fortuna and Carmen veins. Failing to disclose any extension of the Fortuna, the crosscut was turned toward the east in Block 71. The Carmen was intersected, but does not warrant development at that point.

Upper 350 Colonia

A crosscut commenced in Block 46, from the Colonia vein, was driven 106 feet in a southeasterly direction. It will be continued to cut any possible upward extension of the Nueva vein, and expose any offshoots from the Guadalupe and Candelaria veins, if existing.

Upper 150 San Benito

Results were again disappointing in the additional 257 feet driven from Block 78 to prove the territory between the San Benito and the old Upper 150 Salvador Crosscut South. Continuation of the crosscut is planned.

Upper 150 Veta No. 4 South

Other more important development prevented continuous driving of this crosscut throughout the year. An advance of only 177 feet was made; but the crosscut will be continued as working conditions permit.

Upper 150 Catalina

The Upper 150 Catalina heading, inaccessible for many years, was re-opened. An old crosscut west from the Catalina in Block 63 had exposed a narrow vein of no value.

Upper 150 San Miguel—Culebra

After cutting the Culebra No. 2 vein (the vein exposed in Block 49 and referred to in last year's report) the crosscut was continued in a southeasterly direction for an additional 154 feet,

where the extension to the south of the main Culebra vein, now known as the Culebra No. 1, was intersected. Development by means of drifts and raises exposed fair values. Active development on it will be continued this year.

Upper 150 Guadalupe

The crosscut to the east, commenced in 1940 in Block 48, was driven an additional 198 feet, intersecting the Colonia vein No. 1 in Block 44. Results of drifting and raising on this vein are described later under vein development and stoping.

When the Colonia No. 1 was cut, driving of the crosscut northeast, showing a small advance of 136 feet, was stopped to allow the more important and encouraging development of the Colonia to go forward without interruption.

VEIN DEVELOPMENT AND STOPING

Veins Worked in 1941

Ore production in 1941 was obtained from 36 veins, of which 16 produced ore from development only. The Carmen, Colonia, Culebra, Independencia, Jucuara Nos. 1, 2 and 4, Salvador, San Benito Nos. 1 and 2, San Blas No. 2, Santa Fe Nos. 1, 2 and 3, Santa Gertrudis No. 1, Southwest Nos. 1, 2 and 4, and the Termopilas veins yielded 97%, the remaining small tonnage coming from the Catalina No. 2, Culebra No. 1, Concepcion, Jucuara No. 3, Santa Fe Main, Santa Gertrudis No. 2, San Benito No. 3, San Joaquin, North San Miguel, Southwest Nos. 6, 7, 9 and 10, Rosario, and Veta 4 South veins.

Salvador Group

Salvador Vein

It has been stated in previous reports that development on this vein was limited, which is borne out in that, from a total tonnage mined of 17,101, only 336 tons came from development. 46,381 tons of comparatively low grade ore remain in the Active Reserve.

Jucuara No. 1—Fortuna Vein

Steady stoping on a medium scale gave 15,752 tons, of which only 612 were from development. An unbroken reserve of 110,603 tons of good grade silver ore remains.

Carmen Vein

This vein was worked as planned, yielding 6,345 tons, the bulk or 96% being from stoping operations, which leaves 11,824 tons of fair grade ore in the Active Reserve list.

Independencia Group

Independencia Vein

The extraction of 5,882 tons, all from stoping, now leaves a small tonnage of 1,120 which will be stoped during 1942.

San Blas No. 2

Stoping operations produced 1,712 tons. Any increase to the reserve of 20,523 tons is not expected, as the limits of this vein are fairly well defined.

Santa Fe Group

San Benito No. 1 Vein

Drifting and raising on the Lower 400 level, mentioned elsewhere in this report, allowed an increase in the reserve. Careful revision of work executed in the past on the San Benito No. 1 Branch vein at the Lower 400 and 300 horizons in Blocks 86 and 87, permitted an addition to the Active Reserve list in which 4,179 tons of 20 ounces silver and .20 ounce gold per ton is shown for the San Benito No. 1 and branches. Of the 1,535 tons mined, 706 were contributed by development.

San Benito No. 2 Vein

Stoping operations on this vein during the year were on a small scale. Of the 3,841 tons extracted 47% came from development. Driving and raising on the Lower 500 and 400 levels exposed ore of good grade, giving an increase of some 10,000 tons, the total Active Reserve under this heading now showing 38,430 tons of 24 ounces silver and .27 ounce gold per ton as against a value of 26 ounces silver and .29 ounce gold per ton for the previous year.

Santa Fe No. 1 Vein

The limits of this ore body being comparatively well defined, mining was confined mostly to stoping which yielded 10,032 tons, and from development 1,166. An unbroken reserve of 30,978 tons is shown.

Santa Fe No. 2 Vein

Of the 9,849 tons produced, 9,283 came from stopes. It is proposed to continue mining this vein during 1942. A reserve of 43,208 tons is left, of somewhat better grade than formerly, due to the extraction of lower grade blocks.

Santa Fe No. 3 Vein

Ore extracted came from stopes only, amounting to 5,385 tons. The small reserve of 6,230 tons of excellent grade will be greatly reduced during this year.

Jucuara Group

Jucuara No. 2 Vein

This vein was again the greatest single producer of the year with 38,515 tons, of which the bulk, or 94%, was derived from stopes. As explained under "Operating Crosscuts and Raises Below the Peña Blanca Level," completion of shaft raise No. 6 below the Lower 650 level made possible the development of good grade ore, thus partially offsetting ore mined. Notwithstanding 36,102 tons extracted from stopes during the year, the tonnage in Reserve was decreased by only 14,856 tons, which leaves 117,637 tons of 21 ounces silver and .25 ounce gold per ton. From previous development of the Lower 650 level it was known that ore extended below it, but over short lengths, and this condition fortunately obtains on the Lower 750 level. Sinking for a still lower level is planned and some additional ore can be reasonably expected from development on the proposed Lower 850 level.

The total length developed on the Lower 750 level is 430 feet, of which 300 are in ore, and drifting is being continued.

Jucuara No. 3 Vein

The reserve of 10,204 tons of 12 ounces silver and .26 gold per ton remains unchanged, although very small scale stoping operations show 219 tons mined during the year.

Jucuara No. 4 Vein

Increased mining on this vein produced 7,360 tons of which development contributed only 350 tons. Stoping on an equal basis is planned for 1942 when the unbroken reserve of 12,446 tons of 32 ounces silver will be considerably depleted.

Old Mine Group

Colonia Vein No. 1

The intersecting of the extension of this vein in Block 44 on the Upper 150 level by the crosscut commenced from Block 48, and by subsequent intensive drifting and raising, resulted in a considerable increase in the reserves, now totaling for this vein 76,354 tons with the good gold content of .22 ounce per ton. The active development of all levels between, and inclusive of, the Upper 450 and Lower 300 levels, is chiefly responsible for the maintenance of the ore reserves in such satisfactory condition. The limits of this ore body to the south have generally been reached on all levels above the Peña Blanca; but the lower levels can be expected to develop limited additional ore southward. To the north all levels have been carried to the old Colonia stoped out ground where many pillars still exist. The area above the Upper 450 horizon is being developed and will probably be completed in the coming year to the surface, an average distance of

200 feet above the Upper 450 level. Tonnage extracted, all from development operations, was 12,601.

Culebra Vein No. 2

Steady development was carried on, realizing 4,553 tons from development only. A new addition has been made to its reserve, totalling 18,716 tons of fair grade. Drifting and raising is being continued.

Culebra No. 1 Vein

Development on a moderate scale on this vein opened up ore of fair grade which permits the inclusion of a small tonnage to the active list. 830 tons were produced, all from development.

Southwest No. 1 Vein

30,884 tons extracted from this vein makes it the second largest producer for the year, 96% of the tonnage being derived from stopes. 4,783 tons remain in reserve.

Southwest No. 2 Vein

A small ore body known as Southwest 2-A, has, in previous reports, been included with the Southwest No. 2 vein. The Southwest 2-A vein, although an offshoot from Southwest No. 2, has now been located between the Lower 300 and Lower 400 levels and therefore calculated for reserves and referred to later in this report under Southwest No. 10 Vein. The Southwest No. 2 vein produced 1,358 tons, practically all from stopes, leaving an unbroken reserve of 15,685 tons.

Southwest No. 4 Vein

Stoping as planned on a moderate scale contributed 2,125 tons, which now leaves 7,565 tons of 28 ounces silver and .11 ounce gold per ton. Stoping will be continued throughout the year.

Southwest No. 6 Vein

Small scale development operations, netting 429 tons, leaves this vein relatively unchanged from last year, with a reserve of 5,150 tons.

Southwest No. 7 Vein

Raises from the Lower 400 level failed to expose the grade of ore expected. Its calculated reserve has, therefore, been slightly decreased to 8,899 tons. From development sources 235 tons were obtained.

Southwest No. 10 Vein

This vein, originally included under the Southwest No. 2 as No. 2-A, produced 175 tons from development. The Southwest No. 10 is not expected to be a large producer.

A small reserve is added which shows 2,773 tons of 19 ounces silver.

Termopilas Vein

Stoping from the Upper 700 level almost to surface, 3,075 tons were extracted, making the unbroken reserve of this vein 6,464 tons of 14 ounces silver and .13 ounce gold per ton.

Santa Gertrudis Vein

Driving on the Lower 400 level and raises therefrom, exposing ore of fair grade, resulted in an increase to 36,392 tons. Of the 2,476 tons extracted, 1,639 tons came from drifting and raising.

The Lower 500 level thus far shows no ore, and the lowest limits probably lie above this level.

Other Veins

Small tonnages were extracted from the following veins, all from development, aggregating 2,975 tons: Catalina No. 2, Concepcion, Culebra Stringer, Rosario, Rosario No. 3, Santa Fé Main, Santa Gertrudis No. 2, San Benito No. 3, San Joaquin, San Miguel North, Southwest No. 9, and Veta No. 4 South. Old fills produced 150 tons.

THE MILL

A slight improvement in percentage recovery, in both silver and gold values, was effected, and a considerable reduction in per ton costs.

The major reduction in costs came about through lower cyanide consumption per ton.

Tonnage Crushed

	1941	1940
Total Wet Tons received	202,881.84	200,925.82
Average per cent of moisture	8.0445	8.0618
Total Dry Tons milled	186,600	184,600
Average Tons milled per day (365 days 1941—366 days 1940)	511	504
Average Tons milled per day full running time	532	527
Average Tons milled per day per 1,850 lbs. Stamps	26.6	26.4
Number of 1,850 Lb. Stamps	20	20
Total Tons treated by Mill to December 31, 1941	3,683,308	3,501,708

Recovery

Average ounces silver received per ton.....	20.3234	23.0419
Total ounces silver produced.....	3,792,355	4,253,538
Average ounces silver recovered per ton....	18.6960	21.1222
Total ounces silver recovered.....	3,488,677	3,899,164
Average silver recovery, per cent.....	91.9924	91.6687
Average ounces gold received per ton.....	.13040	.13389
Total ounces gold produced.....	24,333	24,716
Average ounces gold recovered per ton.....	.12234	.12553
Total ounces gold recovered.....	22,828	23,173
Average gold recovery, per cent.....	93.8143	93.7575

Treatment Period Detail

	1941				1940			
			Ag.	Au.			Ag.	Au.
	Hrs.	Min.	%	%	Hrs.	Min.	%	%
Extraction by Crushing Solution.	9	00	37.76	76.19	9	00	38.22	78.06
Extraction by Agitation.....	70	29	54.68	18.91	69	41	54.07	16.82
Extraction in Slimes Presses....			.81	.50			.81	.78
	—	—	93.25	95.60	—	—	93.10	95.66
Less Dissolved Value Loss.....			1.26	1.79			1.43	1.90
Recovery			91.99	93.81			91.67	93.76
Per Cent Sand not passing 150 Mesh			22.68				24.70	

Comparative Statement

On Consumption of Mill Supplies

	1941					1940				
	Amount Consumed	Total Cost U.S.Cy.	Cost Per Unit	Cost Per Ton Crushed (Tons) 186,600	Cost Per Fine Oz. Bullion Produced (Ounces) 3,511,504.77	Amount Consumed	Total Cost U.S.Cy.	Cost Per Unit	Cost Per Ton Crushed (Tons) 184,600	Cost Per Fine Oz. Bullion Produced (Ounces) 3,922,337.73
Cyanide (100% KCN)	662,612 lbs.	$ 78,968.90	$.1192	$.4232	$.0225	765,471 lbs.	$ 91,042.56	$.1189	$.4932	$.0232
Sulphur	261,874 "	10,102.11	.0386	.0541	.0029	270,125 "	10,565.63	.0391	.0572	.0027
Zinc Dust	132,982 "	18,647.24	.1402	.0999	.0053	140,153 "	18,564.20	.1325	.1006	.0047
Muriatic Acid	14,540 "	2,011.45	.1383	.0108	.0006	14,995 "	2,232.98	.1489	.0121	.0006
72" Filter Canvas	4,841 yds.	4,712.60	.9735	.0252	.0013	4,951 yds.	3,852.25	.7781	.0209	.0010
Lime	3,510,360 lbs.	25,226.21	.0072	.1352	.0072	3,184,330 lbs.	22,875.88	.0072	.1239	.0058
Powdered Borax	7,000 "	407.19	.0582	.0022	.0001	7,300 "	429.27	.0588	.0023	.0001
Soda	1,568 "	87.11	.0556	.0005	....	1,568 "	90.04	.0574	.0005	....
Fuel Oil	5,357 gals.	898.75	.1678	.0048	.0003	5,911 gals.	1,066.40	.1804	.0058	.0003
Steel Balls	294,682 lbs.	14,047.24	.0477	.0753	.0040	287,383 lbs.	13,265.25	.0462	.0718	.0034
Crusher & Battery Liners, Shoes & Dies	33,204 "	2,962.08	.0892	.0159	.0008	32,932 "	3,111.95	.0945	.0169	.0008
Tube Mill and Ball Mill Liners	60,796 "	8,809.16	.1449	.0472	.0025	73,116 "	9,586.51	.1311	.0519	.0024
		$166,880.04		$.8943	$.0475		$176,682.92		$.9571	$.0450

POWER

Rainfall	1941	1940
Total rainfall, inches	53.87	57.83
Number of rainy days	201	183
Greatest monthly rainfall, inches	11.12 (May)	12.14 (Sept.)
Lowest monthly rainfall, inches	.36 (Feb.)	.15 (Feb.)
Greatest single rainfall, inches	2.17 (April)	2.02 (June)

POWER DISTRIBUTION

	1941		1940	
	Kilowatt Hours	K.W. Hrs. Per Ton	Kilowatt Hours	K.W. Hrs. Per Ton
Mine Power	2,979,440	15.967	2,610,330	14.140
Electric Haulage	240,540	1.289	206,190	1.117
Blacksmithing	51,340	.275	43,870	.238
Mine Sawmill	150	.001	.....	....
Mine Lights	60,180	.323	64,040	.347
Hoisting	38,280	.205	24,940	.135
Ventilation	9,030	.048	.....	....
Mill Power	6,013,740	32.228	6,011,685	32.566
Mill Lights	87,140	.467	58,330	.316
Surface Lights	498,380	2.671	537,410	2.911
Surface Power	28,205	.151	34,815	.189
Machine Shop	109,610	.587	83,400	.452
Laboratory	20,255	.109	18,580	.101
Sand	4,720	.025	7,840	.042
Totals	10,141,010	54.346	9,701,430	52.554

Power Production by:	1941		1940	
	Kilowatt Hours	Per Cent	Kilowatt Hours	Per Cent
San Juancito Plant	5,127,460	50.56	3,890,300	40.10
Guadalupe Plant	3,274,550	32.29	3,252,830	33.53
Aguacatal Plant	1,056,600	10.42	1,169,900	12.06
Diesel Plant	682,400	6.73	1,388,400	14.31
Totals	10,141,010	100.00	9,701,430	100.00

COST OF POWER PRODUCTION

1941

	Hydro.		*Diesel*		*Total*		
	Amount U.S. Cy.	Cost per K.W. Hour	Amount U.S. Cy.	Cost per K.W. Hour	Amount U.S. Cy.	Cost per K.W. Hour	Per Ton
Labor	$13,212.33	.0013969	$ 1,151.83	.0016879	$14,364.16	.0014165	.07698
Supplies	5,425.03	.0005735	11,108.10	.0162780	16,533.13	.0016303	.08860
Total	$18,637.36	.0019704	$12,259.93	.0179659	$30,897.29	.0030468	.16558

1940

	Hydro.		*Diesel*		*Total*		
	Amount U.S. Cy.	Cost per K.W. Hour	Amount U.S. Cy.	Cost per K.W. Hour	Amount U.S. Cy.	Cost per K.W. Hour	Per Ton
Labor	$11,751.98	.0014137	$ 3,351.60	.0024140	$15,103.58	.0015568	.08182
Supplies	4,544.77	.0005467	23,699.48	.0170696	28,244.25	.0029114	.15300
Total	$16,296.75	.0019604	$27,051.08	.0194836	$43,347.83	.0044682	.23482

Based on Horsepower Generated:	1941	1940
Horsepower Hours	13,588,953	12,999,916
Cost per Horsepower Hour	$ 0.002274	$ 0.003334
Cost per Horsepower Year	19.92024	29.28998
Cost per Horsepower Year—Decrease	9.36974	

POWER

The installation of the new penstock for the San Juancito Plant, completed early in the year, resulted in a marked improvement in efficiency and consequent saving in power costs.

The need of the Diesel Plant was greatly diminished, resulting in a saving in its operation of over $14,000.00, of which at least $10,000.00 can be attributed to the better efficiency of the San Juancito Hydro-Electric Plant. Better distributed rainfall accounted for the rest.

Power costs per ton were reduced approximately 7 cents per ton from the previous year.

GENERAL

An option taken on the Herederos de Santos Soto properties in the vicinity of the Valle de Angeles was relinquished late in the year.

Diamond drilling of the Liquidambal Zone, one of the above mentioned properties, together with development of the San Rafael vein, failed to disclose favorable ground for the occurrence of worthwhile veins.

A development program on the Las Animas property exposed a low grade ore body, too small and too complicated metallurgically to be of interest.

An option was also taken early in the year on a silver-lead replacement deposit in the Department of Santa Barbara, Honduras, known as Mochito. Some attractive values have been found, but the extent of the ore body is still undefined. Within the first sixty days of this year it will be known whether the prospect warrants more aggressive development by means of a compressor and machine drills.

The problems incident to these times will be met as they appear in the most efficient way possible by all members of the staff, whose efforts during the past year are deserving of special commendation.

This opportunity is taken to acknowledge, with sincere appreciation, the advice and cooperation of the Officers and Board of Directors in meeting the requirements of present day conditions.

Respectfully submitted,

K. H. MATHESON,
General Manager.

Annex "A"—Active Ore Reserves

ESTIMATED RESERVES (13 & 14 cu.ft. per ton)	Average Width Feet Vein	Waste	Stope	Tons of Ore Plus Waste	Av. Troy Ozs. Per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Veins								
Independencia Group								
Independencia	1.95	1.55	3.50	1,120	17	.05	19,439	53
San Blas No. 2	1.02	1.73	2.75	20,523	10	.08	208,511	1,585
Salvador Group								
Salvador	1.82	1.65	3.47	46,381	16	.03	725,637	1,622
Jucuara No.1 (Fortuna)	2.34	1.62	3.96	110,603	27	.06	2,976,456	6,689
Fortuna—North	1.87	1.49	3.36	2,630	21	.04	54,769	105
Fortuna Vein	2.10	1.40	3.50	4,192	12	.03	49,891	119
Carmen No. 1	2.58	1.30	3.88	11,824	18	.04	209,316	471
Jucuara Group								
Jucuara No. 2	2.73	2.45	5.18	117,637	21	.25	2,484,989	29,371
Jucuara No. 3	1.73	2.11	3.84	10,204	12	.26	118,166	2,625
Jucuara No. 4	2.23	1.52	3.75	12,446	32	.10	401,240	1,259
Jucuara No. 5	2.60	1.90	4.50	2,160	14	.10	31,200	212
Santa Fe Group								
Santa Fe No. 1	1.93	1.59	3.52	30,978	19	.16	592,121	4,935
Santa Fe No. 2	2.65	2.73	5.38	43,208	48	.46	2,087,472	19,907
Santa Fe No. 3	2.35	1.65	4.00	6,230	32	.36	201,688	2,246
San Benito No. 1	1.27	1.73	3.00	4,179	20	.20	84,541	844
San Benito No. 2	1.74	1.31	3.05	38,430	24	.27	919,752	10,550
Old Mine Group								
Catalina No. 2	1.77	1.23	3.00	3,612	20	.03	71,751	93
Capitana	0.81	2.19	3.00	2,285	3	.28	6,664	639
Colonia No. 1	1.55	1.90	3.45	76,534	14	.22	1,080,614	17,019
Colonia No. 2	1.38	1.62	3.00	1,602	11	.10	17,541	163
Culebra No. 1	1.92	1.08	3.00	1,994	16	.04	31,338	72
Culebra No. 2	1.83	1.25	3.08	18,716	17	.06	320,817	1,051
Southwest No. 1	3.85	2.15	6.00	4,783	8	.10	37,681	464
Southwest No. 2	2.28	1.72	4.00	15,685	12	.08	182,983	1,211
Southwest No. 3	1.47	3.03	4.50	14,459	14	.03	207,130	473
Southwest No. 4	1.59	2.91	4.50	7,565	28	.11	212,036	827
Southwest No. 6	2.01	0.49	2.50	5,150	31	.09	160,209	469
Southwest No. 7	1.39	1.11	2.50	8,899	19	.14	168,668	1,279
Southwest No. 10	1.61	1.89	3.50	2,773	19	.09	52,921	251
San Joaquin	1.00	2.00	3.00	3,538	19	.28	68,717	987
Termopilas	1.67	1.62	3.29	6,464	14	.13	90,991	832
Other Veins								
Veta 4 South	1.43	1.57	3.00	22,467	20	.03	447,046	692
Santa Gertrudis	1.61	1.43	3.04	36,392	15	.10	553,228	3,743
				695,663	21.38	.1622	14,875,503	112,858

Broken Ore in Stopes

BROKEN ORE RESERVE (20.5 cu. ft. per ton)	
Veins	
Catalina No. 2	78
Fortuna	1,617
Independencia	2,224
Jucuara No. 1	13,945
Salvador	8,136
San Benito No. 1	3,010
San Benito No. 2	2,886
Santa Fe No. 1	6,532
Santa Fe No. 2	10,338
Santa Fe No. 3	250
Santa Gertrudis	42
Mine Storage Chutes	2,042
Mill Ore Bin	520
TOTAL	51,620

SUMMARY—ACTIVE RESERVES

Estimated Ore at 13 & 14 cu. ft. per ton	695,663	21.38	.1622	14,875,503	112,858
Broken Ore Reserves at 20.5 cu. ft. per ton	51,620	20.00	.1000	1,032,400	5,162
Total Active Reserves as of Jan. 1 ,1942	747,283	21.29	.1579	15,907,903	118,020

Note: While it is inherently probable that the tonnages and grades when actually mined from these individual veins will vary somewhat, up or down, from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

Annex "B"—Inactive Ore Reserves

ESTIMATED RESERVES (13 cu. ft. per ton) Veins	Tons of Ore Plus Waste	Av. Troy Ozs. Per Ton Ag.	Au.	Total Troy ounces Ag.	Au.
Esperanza (South San Miguel Extension South)	5,450	14.	.04	76,300	218
Porvenir	2,088	13.	.03	27,189	53
Nueva	8,450	9.	.11	76,050	929
Veta No. 4 North	4,166	11.	.03	45,780	126
Northwest	1,500	15.	.14	22,050	208
Rosario No. 2	2,245	9.	.12	21,307	279
Santa Fe No. 1, Branch No. 1	2,752	9.	.14	23,454	391
Total Inactive Reserves as of Jan. 1, 1942	26,651	11.	.08	292,130	2,204

Annex "C"

Veins and Groups	Drifts	Cross-cuts	Raises	Total Feet
Independencia Group				
Independencia	168	140	353	661
San Blas No. 2	139	356	45	540
Salvador Group				
Salvador	207	218	308	733
Jucuara No. 1 (Fortuna)	218	807	97	1,122
Carmen	246	22	283	551
Jucuara Group				
Jucuara No. 2	1,213	1,798	410	3,421
Jucuara No. 4	68	15	127	210
Santa Fe Group				
Santa Re Main Vein	...	...	74	74
Santa Fe No. 1	986	392	206	1,584
Santa Fe No. 2	254	...	202	456
Santa Fe—Strg.	142	...	...	142
San Benito No. 1	258	509	125	892
San Benito No. 2	1,129	556	724	2,409
San Benito No. 3	98	...	...	98
Old Mine Group				
Catalina No. 1	112	123	...	235
Catalina No. 2	555	588	164	1,307
Culebra No. 1	423	48	185	656
Culebra No. 2	1,672	590	1,642	3,904
Culebra—Strg.	197	...	52	249
Colonia No. 1	2,852	885	2,429	6,166
Concepción	...	143	...	143
Rosario	34	1,279	...	1,313
Rosario No. 2	681	394	257	1,332
Southwest No. 1	620	981	718	2,319
Southwest No. 2	88	28	98	214
Southwest No. 3	...	26	...	26
Southwest No. 4	...	16	8	24
Southwest No. 7	525	532	354	1,411
Southwest No. 9	57	...	8	65
Southwest No. 10	169	51	152	372
San Joaquin	495	1,446	...	1,941
San Miguel N.	514	226	78	818
Guadalupe	...	350	...	350
Los Cedros	...	...	19	19
Northwest	...	38	...	38
Other Veins				
Porvenir	...	366	...	366
Santa Gertrudis No. 1	648	...	484	1,132
Santa Gertrudis No. 2	52	...	...	52
Veta No. 4 South	249	231	180	660
Crosscuts				
Lower 200 Jutiapa Crosscut	...	438	...	438
Upper 150 El Cumbo No. 1 Crosscut	...	52	...	52
Lower 500 El Cumbo No. 2 Crosscut	...	544	...	544
Lower 400 Aguacatal Crosscut	...	328	...	328
Shaft Raises				
Shaft No. 6	...	...	73	73
Shaft No. 7	...	...	322	322
TOTALS	15,069	14,516	10,177	39,762

Annex "D"

ORE PRODUCTION

From Stoping Operations: *Veins*	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Independencia Group													
Independencia	452	344	515	558	360	272	435	328	328	587	390	543	5,112
San Blas No. 2.....	154	218	...	...	...	92	183	220	294	317	214	20	1,712
Salvador Group													
Salvador	1,024	1,308	1,081	1,477	1,794	1,111	1,701	2,183	1,612	909	984	1,581	16,765
Jucuara No. 1 (Fortuna)	2,549	1,882	2,071	1,519	357	709	754	722	1,074	1,054	1,350	1,099	15,140
Fortuna	...	...	...	...	1	...	...	...	...	...	...	...	1
Carmen	456	358	512	455	474	501	483	464	483	544	552	454	5,736
Jucuara Group													
Jucuara No. 2.....	3,388	2,995	2,918	3,157	3,290	3,495	2,778	2,670	2,227	2,957	2,969	3,259	36,103
Jucuara No. 3.....	37	50	47	27	34	24	...	...	...	...	...	...	219
Jucuara No. 4.....	833	733	748	517	506	481	511	535	596	592	475	483	7,010
Santa Fe Group													
Santa Fe No. 1.....	482	919	694	268	29	725	323	949	1,418	1,755	1,482	988	10,032
Santa Fe No. 2.....	1,064	405	634	1,038	802	1,310	799	991	1,054	473	316	397	9,283
Santa Fe No. 3.....	228	591	500	604	989	800	493	86	159	72	374	489	5,385
San Benito No. 1.....	1	...	12	40	...	143	25	...	236	332	40	...	829
San Benito No. 2.....	305	4	45	325	459	...	...	...	...	...	402	508	2,048
San Benito No. 3.....	...	...	...	...	...	...	...	144	...	...	...	...	144
Old Mine Group													
Southwest No. 1.....	2,727	2,517	2,856	2,356	2,663	2,631	2,531	2,565	2,415	3,067	1,991	1,223	29,542
Southwest No. 2.....	...	...	...	...	...	...	...	...	...	132	383	682	1,197
Southwest No. 4.....	139	173	217	171	217	122	156	216	217	274	188	35	2,125
Southwest No. 6.....	...	...	...	...	...	...	...	...	...	22	282	125	429
Termopilas	125	380	672	515	153	591	625	14	...	...	...	...	3,075
Old Fills	...	34	...	...	74	34	...	...	8	...	...	...	150
Other Veins													
Santa Gertrudis No. 1...	...	...	...	...	...	...	362	49	...	...	...	426	837
STOPING TOTALS ...	13,964	12,911	13,522	13,027	12,202	13,041	12,159	12,136	12,121	13,087	12,392	12,312	152,874

From Development Operations:

Veins	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Independencia Group													
Independencia	6	29	9	44	175	230	201	36	40	...	...	...	770
Salvador Group													
Salvador	67	3	...	...	1	157	31	65	12	...	...	...	336
Jucuara No. 1 (Fortuna)	102	...	2	...	...	...	...	64	89	303	5	47	612
Carmen No. 1	166	212	144	...	...	...	...	...	...	...	6	81	609
Jucuara Group													
Jucuara No. 2	...	195	126	...	...	...	108	130	534	323	357	639	2,412
Jucuara No. 4	...	...	5	36	75	93	104	26	...	...	...	11	350
Santa Fe Group													
Santa Fe Main Vein	17	...	...	...	...	...	...	...	...	...	...	...	17
Santa Fe No. 1	...	77	22	91	49	246	367	153	52	17	63	29	1,166
Santa Fe No. 2	...	85	87	27	...	119	129	79	40	...	...	...	566
San Benito No. 1	...	46	168	91	117	...	...	...	...	32	92	160	706
San Benito No. 2	555	247	323	148	96	59	6	72	56	161	57	13	1,793
San Benito No. 3	86	...	...	...	...	...	...	...	...	...	...	...	86
Old Mine Group													
Catalina No. 2	14	179	221	...	...	...	48	...	...	...	...	...	462
Culebra No. 1	...	...	...	...	...	...	...	211	218	252	...	149	830
Culebra No. 2	644	403	472	588	486	201	580	243	423	246	127	140	4,553
Culebra Stringer	...	...	...	...	...	...	...	...	...	...	132	228	360
Colonia No. 1	...	...	6	579	1,281	1,170	1,207	1,677	1,133	1,409	2,200	1,939	12,601
Southwest No. 1	83	59	239	532	363	66	...	...	...	...	...	...	1,342
Southwest No. 2	60	...	94	7	...	...	...	...	...	...	...	...	161
Southwest No. 7	7	31	28	...	25	20	120	4	...	...	...	...	235
Southwest No. 9	...	...	...	...	6	...	...	...	...	...	...	...	6
Southwest No. 10	38	...	...	...	...	...	...	...	...	23	52	62	175
San Miguel North	...	...	...	...	...	...	...	225	191	161	47	9	633
San Joaquin	17	...	...	...	...	...	...	...	...	...	...	...	17
Rosario	...	...	...	45	...	...	...	...	...	...	...	...	45
Rosario No. 2	...	...	...	...	308	118	86	57	72	...	...	...	641
Concepción	...	...	...	...	...	...	...	122	50	...	...	...	172
Other Veins													
Santa Gertrudis No. 1	235	179	126	241	346	136	238	20	...	...	...	118	1,639
Santa Gertrudis No. 2	40	1	...	...	...	...	...	...	...	...	...	...	41
Veta No. 4 South	...	...	...	...	8	...	19	102	88	61	73	...	351
DEVELOPMENT TOTALS	2,137	1,746	2,072	2,429	3,336	2,615	3,244	3,286	2,998	2,988	3,211	3,625	33,687
STOPING TOTALS	13,964	12,911	13,522	13,027	12,202	13,041	12,159	12,136	12,121	13,087	12,392	12,312	152,874
GRAND TOTALS	16,101	14,657	15,594	15,456	15,538	15,656	15,403	15,422	15,119	16,075	15,603	15,937	186,561

Annex "E"—Tonnage Mined—From October 1, 1907 to January 1, 1942

Veins	Total Incl. Stoping, Devel. and Filling Oct. 1, 1907 to Dec. 31, 1940	Total Incl. Stoping, Devel. and Filling for Year 1941	Grand Total Incl. Stoping, Devel. & Filling Jan. 1, 1942
Buena Ventura	98,490	.....	98,490
Candelaria Group	166,573	.....	166,573
Capitana	60,967	.....	60,967
Carmen No. 1	42,366	6,345	48,711
Carmen No. 2	1,105	.....	1,105
Catalina	6,587	.....	6,587
Catalina No. 2	.....	462	462
Colonia No. 1	61,582	12,601	74,183
Colonia No. 2	665	.....	665
Concepción	19,170	172	19,342
Crisanta	7,410	.....	7,410
Culebra No. 1	107,132	1,190	108,322
Culebra No. 2	.....	4,553	4,553
Esperanza	8,710	.....	8,710
Fortuna Group	101,982	1	101,983
Guadalupe	61,177	.....	61,177
Independencia	293,902	5,882	299,784
Jucuara No. 1 (Fortuna)	268,297	15,752	284,049
Juacara No. 2	163,309	38,515	201,824
Jucuara No. 3	39,396	219	39,615
Jucuara No. 4	25,729	7,360	33,089
Jucuara No. 5	1,901	.....	1,901
56 Fault Vein	4,954	.....	4,954
North	4,647	.....	4,647
Northwest	89,984	.....	89,984
Nueva	28,147	.....	28,147
Porvenir	2,985	.....	2,985
Rosario	150,982	45	151,027
Rosario No. 2	.....	641	641
Salvador	641,354	17,101	658,455
San Benito No. 1	117,075	1,535	118,610
San Benito No. 2	24,559	3,841	28,400
San Benito No. 3	.....	230	230
San Blas No. 1	6,938	.....	6,938
San Blas No. 2	12,951	1,712	14,663
San Joaquin	71,632	17	71,649
San Luis	2,389	.....	2,389
San Miguel North	174,801	633	175,434
San Miguel Group	125,855	.....	125,855
Santa Fe Main Vein	189,607	17	189,624
Santa Fe No. 1	33,624	11,198	44,822
Santa Fe No. 2	72,435	9,849	82,284
Santa Fe No. 3	41,718	5,385	47,103
Santa Gertrudis No. 1	37,384	2,476	39,860
Santa Gertrudis No. 2	1,753	41	1,794
Socorro	22,592	.....	22,592
Southwest No. 1	70,914	30,884	101,798
Southwest No. 2	5,980	1,358	7,338
Southwest No. 3	1,666	.....	1,666
Southwest No. 4	2,056	2,125	4,181
Southwest No. 5	422	.....	422
Southwest No. 6	504	429	933
Southwest No. 7	1,424	235	1,659
Southwest No. 9	.....	6	6
Southwest No. 10	.....	175	175
Termopilas	3,823	3,075	6,898
West	97,005	.....	97,005
Veta No. 4 North	11,010	.....	11,010
Veta No. 4 South	7,643	351	7,994
Ore from Development	63,599	.....	63,599
Miscellaneous	7,088	150	7,238
TOTALS	3,667,950	186,561	3,854,511

Summary to Annex "E"—From October 1, 1907 to January 1, 1942

From Stoping	2,991,643
From Development	625,609
From Fills	237,259
TOTAL	3,854,511

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NEW YORK and HONDURAS ROSARIO MINING COMPANY



SIXTY-SECOND ANNUAL REPORT

NINETEEN HUNDRED AND FORTY-TWO

REPORT of the
NEW YORK and HONDURAS
ROSARIO MINING COMPANY

JANUARY 1, 1943.

NOTICE TO STOCKHOLDERS

STATEMENT MADE PURSUANT TO THE
"RULES RELATING TO SOLICITATION OF PROXIES"
of the
SECURITIES AND EXCHANGE COMMISSION

Stockholders are advised that proxies for the Company's annual meeting, to be held on April 7, 1943, will be requested at a later time. It is expected that the required proxy statement will be sent to stockholders on or about March 15, 1943.

OFFICERS

WM. A. PRENDERGAST, *President*
LEWIS L. CLARKE, *Chairman of Board*
H. A. GUESS, *Vice-President*
W. C. LANGLEY, *Treasurer*
J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

LEWIS L. CLARKE, *Chairman*

H. A. GUESS
DR. J. RALPH JACOBY
HERBERT A. KAUFMANN
W. C. LANGLEY
LESTER S. OPPENHEIMER
WM. A. PRENDERGAST
M. F. SOTO
AMBROSE G. TODD
RICHARD H. VALENTINE

EXECUTIVE COMMITTEE

LEWIS L. CLARKE, *Chairman*
H. A. GUESS
DR. J. RALPH JACOBY
M. F. SOTO
AMBROSE G. TODD

WM. A. PRENDERGAST
W. C. LANGLEY
} *Ex-Officio*

PRESIDENT'S REPORT

March 1, 1943.

To the Stockholders of the
New York and Honduras Rosario Mining Company:

The Sixty-second Annual Report, covering the year 1942, gives the record of your Company during a period of outright war conditions. When we realize the inevitable dislocations in customs and experiences that cannot be avoided under such conditions, it is gratifying that the results of the past year's business have been satisfactory. Our long sustained pleasant relations with the Government of Honduras have been a material contribution to the success of our work in 1942, and for this we extend to His Excellency, President Tiburcio Carias A, and the people of Honduras, our appreciative acknowledgments.

Scope of this report

This report contains complete primary information on every feature of the Company's affairs; but in the interest of economy we have omitted considerable supporting data appearing in former reports.

General Manager's Report (*Pages* 16 *to* 32)

This report, for which we ask your careful study, describes the work performed in the mine. The statements regarding "Mine Reserves" (pages 17, 28, and 29) are of special interest.

Status of Silver

Silver has become an important element in war work. The increase in price (last August) paid for foreign silver has been of great help to this Company in absorbing added costs of supplies and transportation outlays.

Taxation

The Federal Income Tax on Corporations was advanced from a rate of 31% to 40% applying to all income for the year 1942. It is impossible to foretell whether there will be any additional tax imposed for the year 1943, but we cannot be unmindful of the tremendous expenditures required for war purposes, which will be loyally supported by this patriotic Nation.

Probable Earnings for 1943

The estimate for the year 1943, based upon

(1) The grade of ore to be used;

(2) Probable production costs;

(3) Present rates of taxation; and

(4) The present price of silver,

is $2.50 per share. Further advances in cost (now unanticipated) and increased taxation will reduce the figure stated.

Treasury Stock

There was purchased during the month of March 1942, 200 shares of our Company's stock which, with the holdings given in the last Annual Report, make 2,735 shares now in the Treasury, acquired at an average price of $14.74 or $40,323.53.

Neptune Gold Mining Company

The interest on the Debentures held by us ($570,267.57) was paid on the regular interest dates as follows:

Interest to December 31, 1941, on March 2, 1942;
Interest to June 30, 1942, on September 1, 1942;
Interest to December 31, 1942, on March 1, 1943.

A copy of the Annual Report of the Neptune Gold Mining Company will be mailed to you promptly on its issuance.

General Financial and Statistical Matters

A comparative "Statement of Operations" for the years 1942 and 1941 (Page 8), gives the essential statistics of our operations.

The profits for the year 1942, after deducting all charges, was $563,555.97, equal to $3.03 plus per share.

There was paid in dividends from Earnings for the year 1942, $473,441.60, equal to $2.55 per share, compared with $446,407.20, or $2.375 per share in 1941.

Our Income from Investments in 1942 was $91,846.11 compared with $107,324.70 in 1941.

We had Marketable Securities on December 31, 1942, which cost $1,606,014.97 and the Market Value of which on that date was $1,457,347.89, a difference between cost and market value of $148,667.08.

The difference between cost and the market value of securities held on December 31, 1941 was 11-28/100%.

The Bullion Production from the organization of the Company to December 31, 1942 amounted to $67,251,827.00, and the Dividends paid therefrom were $16,649,614.00.

There is submitted with this report and made a part hereof:

1. A Comparative Statement of Operations for the years 1942 and 1941.
2. A Comparative Income and Profits and Loss Statement for the years ended December 31, 1942 and December 31, 1941.
3. A Balance Sheet for the year ended December 31, 1942.
4. A Statement of the Surplus Account for the year ended December 31, 1942.
5. A List of the Securities held by this Company December 31, 1942.

Respectfully submitted,

WM. A. PRENDERGAST,
President

Comparative Statement of Operations

Years ended December 31, 1942 and 1941

	Year 1942	Year 1941	Increase Decrease*
Total sales value of Gold and silver recovered	$2,187,817.46	$2,019,045.28	$168,772.18
Tons of ore milled	191,400	186,600	5,800
Average tons milled per day, full running time	543	532	11
Number of men employed per working day	1,188	1,199	11*
Ounces of silver recovered	3,478,831.32	3,486,548.62	7,717.30*
Number of ounces of silver recovered per ton of ore	18.17571	18.68461	.50890*
Silver recovered — percentage	91.5272	91.9362	.4090*
Sales value of silver recovered	$1,414,700.33	$1,220,292.15	$194,408.18
Average sales value of silver per ounce	$ .40666	$ .35000	$ .05666
Average cost of silver per ounce**	$ .18519	$ .18166	$ .00353
Average profit on silver per ounce**	$ .22147	$ .16834	$ .05313
Average sales value of silver recovered per ton of ore	$ 7.39132	$ 6.53961	$ .85171
Average cost of silver per ton of ore**	$ 3.36605	$ 3.39434	$ .02829*
Average profit on silver recovered per ton of ore**	$ 4.02527	$ 3.14527	$ .88000
Ounces of gold recovered	22,089.062	22,821.519	732.457*
Number of ounces of gold recovered per ton of ore	.11541	.12230	.00689*
Gold recovered — percentage	92.7800	93.7883	1.0083*
Sales value of gold recovered	$ 773,117.13	$ 798,753.13	$ 25,636.00*
Average sales value of gold per ounce	$ 35.00	$ 35.00	$ .....
Value of gold recovered per ton of ore	$ 4.03927	$ 4.28056	$ .24129*
Number of bars of bullion shipped from mine	2,026	2,029	3*
Ratio of gold to silver	1:158	1:153	0:005
Total tons treated by mill from 1912 to date	3,879,708	3,688,308	191,400

** After credit for sales value of gold recovered.

Income and Profit and Loss Statement
Years ended December 31, 1942 and 1941

	Year 1942	Year 1941	Increase Decrease*
Production of gold and silver	$2,187,817.46	$2,019,045.28	$168,772.18
Less freight and other expenses on bullion	156,201.82	96,393.90	59,807.92
OPERATING INCOME	$2,031,615.64	$1,922,651.38	$108,964.26
Operating expenses	1,171,241.67	1,247,411.62	76,169.95*
MINE OPERATING PROFIT	$ 860,373.97	$ 675,239.76	$185,134.21
New York administrative and general expenses	89,935.73	88,331.46	1,604.27
NET OPERATING PROFIT	$ 770,438.24	$ 586,908.30	$183,529.94
Add income from investments, etc.	91,846.11	107,324.70	15,478.59*
	$ 862,284.35	$ 694,233.00	$168,051.35
Less other deductions from income (Note A)	65,764.43	60,506.10	5,258.33
PROFIT BEFORE TAXES ON INCOME AND PROVISION FOR DEPLETION	$ 796,519.92	$ 633,726.90	$162,793.02
Taxes on income—estimated (Note B):			
Provision for the year:			
Federal normal income tax and surtax	177,325.16	74,487.49	102,837.67
Government of Honduras	32,674.84	21,120.27	11,554.57
TOTAL TAXES	$ 210,000.00	$ 95,607.76	$114,392.24
	$ 586,519.92	$ 538,119.14	$ 48,400.78
Appropriated for depletion from earnings (Note C)	22,963.95	35,432.47	12,468.52*
NET PROFIT	$ 563,555.97	$ 502,686.67	$ 60,869.30
NOTE A—Other deductions from income include:			
Investigations of outside properties	$ 46,637.07	$ 27,366.12	$ 19,270.95
Federal capital stock tax, New York State franchise tax and New York City gross receipts tax	8,493.55	10,051.38	1,557.83*
Loss on investments sold	.....	17,770.23	17,770.23*
Obsolete inventory written off	2,662.91	3,331.03	668.12*
Business association dues, subscriptions and donations	1,145.00	1,410.00	265.00*
Distributions made in prior years on dividend arrears certificates of Iowa Southern Utilities Company of Delaware now applied against book carrying value of that investment	6,125.00	.....	6,125.00
Sundry	700.90	577.34	123.56
	$ 65,764.43	$ 60,506.10	$ 5,258.33

NOTE B—No provision is required for federal excess profits tax.

NOTE C—Beginning with the year 1932, depletion has been taken in tax returns on a percentage basis in accordance with respective revenue acts. Entries recording depletion as they affect the older portion of the property are carried in the general accounts. Depletion deductions on ore mined from the newer discoveries, which newer discoveries are not carried on the books, are made for income tax purposes only.

ASSETS

Current Assets			
Cash		$ 342,622.52	
Account receivable for sale of silver		67,529.88	
Bullion at smelters and in transit—less allowance for expenses		267,654.04	
Marketable securities—at cost:			
United States Government bonds	$ 665,000.00		
Municipal bonds	174,748.90		
Public Authority bonds	103,777.19		
Domestic Corporation bonds	299,923.75		
Domestic Corporation stocks	362,565.13		
	$1,606,014.97		
Less allowance to reduce to aggregate quoted market prices	148,667.08		
	$1,457,347.89		
Interest accrued on bonds	6,277.58	1,463,625.47	
Broken ore in stopes and mill bins—at cost		183,596.23	
Inventories—materials and supplies—at cost		279,118.50	
TOTAL CURRENT ASSETS			$2,604,146.64
Investments and Other Assets			
Neptune Gold Mining Company, ten year 5% income debenture notes, due March 1, 1948, principal amount $570,267.57, and 5,100 shares of its capital stock of no par value—at cost		$ 570,267.57	
Sundry accounts receivable		2,925.40	573,192.97
Prepaid Items, Etc.			
Balance at December 31, 1941 of advance to Government of Honduras, C. A. under Decree No. 67	$ 228,879.73		
Less amount applicable to the year 1942—estimated	32,674.84	$ 196,204.89	
Inventories of supplies, prepaid insurance, taxes and other expenses		120,514.52	316,719.41
Buildings, Machinery and Equipment			
At cost		$2,337,742.38	
Less allowance for depreciation		1,902,518.52	435,223.86
Mines, Real Estate and Concessions			
At valuation originally established in 1880		$1,500,000.00	
Less allowance for depletion applicable thereto		1,195,894.06	304,105.94
TOTAL ASSETS, exclusive of 1916 adjustment to mine valuation			$4,233,388.82
Adjustment to Mine Valuation			
As of December 31, 1916		$1,500,000.00	
Less allowance for depletion applicable thereto		1,195,894.05	
Unamortized amount (per contra)			304,105.95
TOTAL ASSETS, including 1916 adjustment to mine valuation			$4,537,494.77

SHEET
31, 1942

LIABILITIES

Current Liabilities

Drafts payable		$ 45,505.25	
Accounts payable		100,852.92	
Accrued taxes		6,500.00	
Federal taxes on income of the year ended December 31, 1942—estimated	$177,325.16		
Less United States Treasury tax notes purchased for payment of such taxes when due	150,700.00	26,625.16	
TOTAL CURRENT LIABILITIES			$ 179,483.33

Reserve for Contingencies

Appropriated from earnings per resolution of Board of Directors			25,000.00

Capital Stock and Surplus

Capital stock (par value $10.00 per share):			
Authorized and issued—188,367 shares		$1,883,670.00	
Less in treasury — 2,735 shares		27,350.00	
Outstanding 185,632 shares		$1,856,320.00	
Earned surplus		2,172,585.49	4,028,905.49
Total liabilities, reserve, capital stock and earned surplus, exclusive of surplus from appreciation of mines			$4,233,388.82
Surplus from 1916 *Appreciation of Mines*		$1,500,000.00	
Less depletion applicable thereto written off to December 31, 1942		1,195,894.05	
Balance at December 31, 1942 (per contra)			304,105.95
Total liabilities, reserve, capital stock, earned surplus and surplus from appreciation of mines			$4,537,494.77

Statement of Surplus

Year ended December 31, 1942

EARNED SURPLUS

Balance at January 1, 1942		$2,065,196.96
ADDITIONS		
Net profit for the year	$563,555.97	
Restoring to earned surplus portion of reserve previously provided to adjust marketable securities to aggregate quoted market prices, not required at December 31, 1942, because of increase in aggregate quoted market prices of securities by this amount during year	18,352.16	581,908.13
		$2,647,105.09
DEDUCTIONS		
Dividends paid, totalling $2.55 per share:		
March 28, 1942—$ .40 per share	$ 74,332.80	
June 27, 1942— .40 per share	74,252.80	
Sept. 26, 1942— .75 per share	139,224.00	
Dec. 26, 1942— 1.00 per share	185,632.00	$473,441.60
Excess of cost over par value of 200 shares of Company's capital stock purchased during year	1,078.00	474,519.60
Balance at December 31, 1942		$2,172,585.49

SURPLUS FROM APPRECIATION OF MINES

Balance at January 1, 1942	327,069.90	
Less allowance for depletion on appreciation of mine valuation applicable to 1942 production	22,963.95	
Balance at December 31, 1942		304,105.95
Total surplus at December 31, 1942		$2,476,691.44

Marketable Securities

December 31, 1942

	Par Value	Market Value	
Bonds			
United States Government			
Treasury Bonds:			
1¾% due June 15, 1948	$100,000.00	$100,156.25	
2¼% due June 15, 1955-1952	50,000.00	50,578.13	
2¼% due June 15, 1956-1954	135,000.00	141,328.13	
2½% due March 15, 1958-1956	80,000.00	82,525.00	
2½% due June 15, 1967-1962	50,000.00	50,062.50	
2½% due September 15, 1972-1967	200,000.00	201,562.50	
Savings bonds, 2½% Defense Series "G", due May 1, 1953	50,000.00	48,900.00	
New York City Bonds			
3% Corporate stock for Transit Unification, Series R-31, due June 1, 1980	175,000.00	181,562.50	
Port of New York Authority			
3% General and Refunding bonds, Sixth Series, due December 1, 1975	50,000.00	48,000.00	
Triborough Bridge Authority			
3¼% Sinking Fund Revenue Bonds, due February 1, 1980	50,000.00	44,250.00	$948,925.01
Domestic Railroad Bonds			
Chicago and North Western Railway Co., 1st and Ref. Mtge. 4½% Gold Bonds, due May 1, 2037	25,000.00	$ 5,687.50	
The Chicago, Rock Island and Pacific Railway Co. 1st and Ref. Mtge. 4% Gold Bonds, due April 1, 1934	50,000.00	9,562.50	
New Orleans, Texas and Mexico Railway Co. 1st Mtge. 5½% Gold Bonds Series "A", due April 1, 1954	25,000.00	11,937.50	
New York, Chicago and St. Louis R. R. Co., Ref. Mtge. Bonds Series "C" 4½%, due September 1, 1978	50,000.00	32,250.00	
St. Louis-San Francisco Railway Co. Prior Lien Mtge. 5% Gold Bonds, Series "B", due July 1, 1950	50,000.00	10,000.00	69,437.50
Domestic Public Utility Bonds			
Electric Power and Light Corp. 5% Gold Debentures, due February 1, 2030	50,000.00	$ 44,000.00	
Joplin Water Works Co. 1st Mtge. 5% Gold, Series "A", due March 1, 1957	25,000.00	26,375.00	
(FORWARD)		$ 70,375.00	$1,018,362.51

Marketable Securities (Continued)

	Par Value	Market Value	
(FORWARD)		$ 70,375.00	$1,018,362.51
Domestic Public Utility Bonds (continued)			
Mississippi Power and Light Co. 1st Mtge. 5% Gold Bonds, due December 1, 1957	50,000.00	51,750.00	122,125.00

	Number of Shares	Market Value	
Stocks			
American Chicle Co., common stock, no par	1,000	$100,750.00	
Arkansas Power and Light Co., $6.00 cumulative preferred stock, no par	500	44,000.00	
The Commonwealth and Southern Corp. $6.00 cumulative preferred stock, no par	550	20,350.00	
Florida Power and Light Co., $7.00 cumulative preferred stock, no par	500	40,500.00	
The Home Insurance Co., capital stock par value $5.00 per share	621	17,310.38	
Iowa Southern Utilities Company of Delaware:			
Common stock, par value $15.00 per share	2,100	2,887.50	
Dividend arrears certificate on 500 shares of 7% cumulative preferred stock		5,250.00	
Jersey Central Power and Light Co. 5½% cumulative preferred stock, par value $100.00 per share	500	32,500.00	
Public Service Co. of Indiana Inc.:			
5% cumulative preferred stock Series "A", par value $100.00 per share	500	46,875.00	
Common stock, no par	500	6,437.50	316,860.38
Total market value at December 31, 1942			$1,457,347.89

United States Treasury Notes		
Purchased for payment of federal income taxes:		
Tax Series "B"—1943	$ 700.00	
Tax Series "C"—1945	$150,000.00	$ 150,700.00
Other Investments (at cost)		
Neptune Gold Mining Company ten year 5% income debenture notes due March 1, 1948, principal amount $570,267.57 and 5,100 shares of its capital stock of no par value		$ 570,267.57

Report of Auditors

New York and Honduras Rosario Mining Company:

We have examined the balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY as of December 31, 1942, and the statements of profit and loss and surplus for the year then ended, have reviewed the system of internal control and the accounting procedures of the Company, including minutes of stockholders' and directors' meetings, and have examined or tested accounting records of the Company and other supporting evidence at its offices in New York and in Honduras, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary.

Cash, securities and bullion were verified by actual count, inspection of documents and by direct communication with custodian or depositaries. Provision for depletion and depreciation charged to income, as in the past, represents the maximum amount allowable under federal revenue acts applicable to properties carried on the books; depletion deductions on ore mined from the newer discoveries, which newer discoveries are not carried on the books, are made for income tax purposes only.

In our opinion, the accompanying balance sheet and related statements of profit and loss and surplus present fairly the position of NEW YORK AND HONDURAS ROSARIO MINING COMPANY at December 31, 1942 and the results of its operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST.

New York, N. Y.
February 26, 1943.

Honduras Operating Costs in U. S. Currency

	YEAR 1942	Total Costs		YEAR 1941	Total Costs	Cost Per Ton 1942	Cost Per Ton 1941	Cost Per Ounce 1942	Cost Per Ounce 1941
MINING									
Labor		$387,753.67			$406,725.20				
Supplies		252,644.50			273,772.37				
Power		10,024.94			10,017.27				
Depreciation		4,282.42			10,104.35				
ORE MINED AND MILLED									
First of Year	$201,032.38			$207,637.38					
Last of Year	183,596.23	17,436.15	$672,141.68	201,032.34	6,605.04	$707,224.23	$3.51	$3.79	$.1932	$.2028
MILLING									
Labor		$ 82,419.74			$ 79,062.50				
Supplies		198,124.92			199,404.98				
Power		19,637.57			18,868.98				
Depreciation		18,510.98	318,693.21		49,138.39	346,474.85	1.67	1.85	.0916	.0994
ADMINISTRATION									
Labor		$140,265.49			$146,451.33				
Supplies		30,864.18			32,703.87				
Depreciation		9,277.15	180,406.82		14,557.34	193,712.54	.94	1.04	.0518	.0556
			$1,171,241.71			$1,247,411.62	6.12	6.68	.3366	.3578
Credit for Gold			773,117.13			798,753.13	4.04	4.28	.2222	.2291
Net Cost of Silver			$398,124.58			$448,658.49	2.08	2.40	.1144	.1287

GENERAL MANAGER'S REPORT

San Juancito, Honduras, C. A., January 1, 1943.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company:

The following report for the year 1942, with essential data, is submitted for your consideration.

THE MINE

Ore Reserves

The detail of the Ore Reserves, summarized below as of January 1, 1943, is shown in Annex "A":

Comparative Summary—Active Ore Reserves

Based on Silver at 45 cents and Gold at $35.00 per Troy Ounce

	Tons of Ore plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1943	773,337	19.52	.1381	15,097,000	106,786
January 1, 1942	747,283	21.29	.1579	15,907,903	118,020
Increase	26,054				
Decrease		1.77	.0198	810,903	11,234

Comparative Summary—Inactive Ore Reserves Annex "B"

	Tons of Ore plus Waste	Av. Troy Ounces Per Ton Ag.	Au	Total Troy Ounces Ag.	Au
January 1, 1943	25,879	12.00	.06	310,266	1,525
January 1, 1942	26,651	11.00	.08	292,130	2,204
Increase		1.00		18,136	
Decrease	772		.02		679

Development and Operating Connections

Summary of Annex "C"

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet
1942	11,368	8,549	11,098	31,015
1941	15,069	14,516	10,177	39,762
Decrease	3,701	5,967		8,747
Increase			921	

Operating Crosscuts and Raises Below the Peña Blanca Level

Completion of shaft raises Nos. 7 and 8 in the Culebra and Colonia sections respectively, expedited the development of these veins on the lower levels.

Shaft Raise No. 7 extends from the Upper 150 to the Lower 300 level and No. 8 from the Upper 150 to the Lower 400 level. Extension of these shaft raises to the Lower 650 or main haulage level is considered unlikely due to the limited amount of ore that can be expected below the existing shafts.

The main waste raise servicing the Southwest section was originally driven through a fault zone encountered between the Lower 650 and Lower 400 levels. At the beginning of the year the caving of the faulted portion through which the waste pass was driven made it unusable.

Zero Culebra

From the Culebra No. 2 vein a crosscut was started in Block 48 and driven due east a distance of 136 feet to gain better access to the Culebra No. 1 vein on that level. Drifting north and south exposed some 240 feet on a strong fissure of average width, but with spotty values.

Lower 200 Level

In Block 47, and from the northeasterly extension of the Culebra No. 2 vein, a crosscut was driven 84 feet in a direction slightly southeast to cut the Culebra No. 1 vein. At a distance of 50 feet it was cut, but drifting on it has been insufficient to define values on this level.

Lower 200 Southwest No. 1

A crosscut 105 feet in length, commenced in Block 74, was driven in a direction southeast to cut any possible continuity downward of the Southwest No. 5 vein developed on the Zero horizon. Nothing of interest having been exposed over the distance driven, the crosscut was stopped.

Lower 300 Jucuara No. 2

With the object of procuring waste for the cut and fill stopes being worked from the lower levels of the Jucuara No. 2 vein, it was found advisable to continue the crosscuts previously commenced north and south from Blocks 98 and 94 respectively. The crosscut to the north was advanced 338 feet and that to the south, 241 feet; but there were no veins in these crosscuts.

Lower 300 *Concepcion*

From the Concepcion workings, in Block 55, a crosscut east was started and driven 281 feet for the purpose of cutting any downward extension of old surface workings on the Cedros vein. Where intersected the vein proved uninteresting; but when conditions permit this vein should be investigated farther to the east. This can be done better from the surface at a lower elevation.

Lower 300 *San Benito No.* 1

In Block 80, and from the Sante Fe-San Benito workings, a crosscut east was driven 83 feet cutting the San Benito vein already developed on the Lower 400 level. Drifting east some 100 feet on the vein shows values to be inconsistent.

Lower 300 *Southwest No.* 7

The crosscut northwest, started in Block 72, was advanced 130 feet during the first two months of the year without encountering anything of interest. Further exploration in this territory cannot be considered at this time, but is contemplated when more favorable conditions permit.

Lower 400 *Colonia*

From the south extension of the Colonia vein, and beyond the junction of the Nueva, a crosscut was driven 203 feet due south to cut the Candelaria at this elevation. The vein was exposed in Block 46, but 255 feet of drifting failed to find ore of commercial grade.

Lower 400 *Jucuara No.* 2

This crosscut, originally commenced in Block 88, was advanced 321 feet in a northerly direction. Numerous stringers were cut, but none have sufficient value to warrant further investigation. Driving of the crosscut is suspended pending more favorable working conditions.

Lower 650 *Santa Fe No.* 1

To investigate the downward extension of the San Benito No. 2 vein at its southwest extremity, the crosscut commenced from the western end of the Santa Fe No. 1 vein, in Block 75, was driven a further 88 feet, cutting the San Benito No. 2 in Block 98. Drifting 75 feet on the vein to the west proved disappointing.

Operating Crosscuts and Raises above the Peña Blanca Level

Upper 700 *Colonia*

In Block 46, and from the surface, a crosscut was driven 156 feet in a southerly direction to facilitate development of the Colonia vein above the Upper 550 level. The vein has not been encountered where expected, but additional work is bound to discover it inasmuch as it outcrops well above this level.

Upper 650 *Jucuara No.* 1

A crosscut, started from Block 76 and from the north end of the Jucuara Branch No. 1 vein, was driven 55 feet in a direction northeast to look for the displacement of the north end of Jucuara Branch No. 1. In Block 75 a vein was exposed on which 200 feet of drifting to the northwest and southeast opened up ore of moderate grade, permitting a small addition to the active reserve of the Jucuara No. 1, and referred to under that heading as Branch No. 10.

Upper 550 *Colonia*

Commenced in Block 44, from the surface, a crosscut 257 feet in length was driven in a southwesterly direction, cutting the Colonia vein at this horizon in Block 46. Drifting south on the vein at this level gave the good gold results typical of the Colonia, the drift finally connecting with that driven on the Socorro vein many years ago, and known as the U. 600 Socorro Level.

Upper 550 *Salvador*

113 feet of crosscutting, starting in Block 71 in a direction northeast, disclosed, at 50 feet, a parallel vein in the hanging wall of the main Salvador. Limited development to date, on the Upper 450 and 550 levels, shows ore of fair grade, allowing a small increase to the Salvador reserve. It is known as Salvador Branch No. 6.

Upper 450 *Catalina*

Commenced in Block 63, a crosscut was advanced 534 feet on a course slightly north of east toward and beyond the San Miguel vein. Several favorable stringers were exposed which require further development to disclose fully their value.

In Block 64, a crosscut was advanced 615 feet in a direction northwest to intersect any extension upward of the Southwest and Santa Gertrudis veins. Stringers of little value were

revealed over the distance driven, and the crosscut was turned, in Block 68, more to the north, and passed through the Southwest vein where no values occur. Although this work has been suspended for some time, when exploration can be renewed it should be carried north into territory never explored at that horizon.

Upper 350 *Colonia*

This crosscut, commenced in Block 41, was advanced 519 feet to the southeast and south from Block 44 to pass through the Candelaria vein. 130 feet in the footwall of the Candelaria a narrow vein was intersected, but with above average gold content. Drifting and raising on this vein, now called Candelaria Branch No. 1, proved values to be consistent, but coupled with the limited width, too low grade to include in the active reserves at this time.

Upper 350 *Jucuara No.* 1

Commencing in Block 72, a crosscut southwest was driven 105 feet to intersect the extension downward of known good grade ore on the Upper 450 level. Additional crosscutting is necessary in the search for this vein extension.

Upper 150 *Culebra*

In Block 48, a crosscut was driven 190 feet without result in an easterly direction to intersect any possible south extension of the Culebra No. 1 vein.

Upper 150 *San Benito*

258 feet advance in this crosscut, started in Block 78, disclosed a formation distinctly unfavorable for ore occurrence, and the crosscut was stopped.

No material handling raise nor ore and waste passes were driven above the Peña Blanca level.

Vein Development and Stoping

Veins Worked in 1942

Of the 34 veins from which ore was derived during 1942, 10 produced from development sources alone. 96½% of the ore was obtained from the Carmen, Candelaria, Colonia, Culebra No. 1, Independencia, Jucuara Nos. 1, 2, and 4, Salvador, San Benito Nos. 1 and 2, San Blas No. 2, Santa Fe Nos. 1 and 2, Santa Gertrudis No. 1, Southwest Nos. 1, 2, 3 and 6

veins, the remaining small percentage of the tonnage coming from the Catalina, Culebra No. 2, Culebra Stringer, Fortuna, Guadalupe, Jucuara No. 3, Northwest, Nueva, Rorario, San Miguel North, Santa Fe No. 3, Santa Gertrudis No. 2, Southwest Nos. 7 to 10, and the Veta 4 South veins.

Salvador Group

Salvador Vein

The ore taken from this vein, amounting to 25,940 tons, makes it the second largest producer for the year. Development yielded 1,435 tons and there remain 28,577 tons of low grade ore in the Active Reserve. A small addition of low grade ore may be expected from development of branches or parallel veins.

Jucuara No. 1 — Fortuna Vein

Of the 18,172 tons mined, 3872 were from development. Discovery of an extension of the Branch No. 1 on the upper levels permitted a small addition to the unbroken reserve which now shows 137,209 tons of good grade silver ore. This is one of the veins that can be expected to furnish a small tonnage of new ore from further development of branches.

Carmen Vein

Moderate scale stoping shows 6,479 tons and 591 tons from development. The 4,895 tons of low grade ore shown in the Active List will be stoped during 1943, which will complete the mining of the Carmen ore thus far known to exist.

Independencia Group

Independencia Vein

The mining of 4,600 tons, 95% from stoping operations, brings to a conclusion production from this vein. Although subsequent reports may show limited work in this section, any appreciable tonnage can hardly be expected.

San Blas No. 2

Mining on a small scale produced 1,632 tons, all from stopes. An unbroken reserve of 18,070 tons of low grade ore remains.

Santa Fe Group

San Benito No. 1 Vein

The ore exposed on the Lower 400 level, at the eastern extremity, maintained the same good values on opening up

the Lower 500 level and raises therefrom. Steady development resulted in a gratifying increase in both tonnage and grade, as noted under Annex "A" at 12,225 tons of 17 ounces silver and .13 ounce gold per ton. Of the 5,160 tons mined, development yielded 34%.

San Benito No. 2 Vein

From the total tonnage of 5,455, stopes produced 5,269. 53,035 tons of 22-ounce silver and .25 ounce gold per ton remain in the Active List.

Santa Fe No. 1 Vein

A steady stoping program was adhered to throughout the year, 12,641 tons being obtained from this source; total tonnage mined 12,920. Stoping at the same rate during the coming year will considerably deplete the 15,582 tons of good gold content now remaining in the unbroken reserve.

Santa Fe No. 2 Vein

The bulk of the ore, 8,931 tons, was extracted from stopes, with only 505 tons from development. A reserve of 46,446 tons of excellent grade still remains.

Santa Fe No. 3 Vein

Although 536 tons were extracted through stoping operations, the reserve of 6,230 tons of excellent grade ore remains unchanged.

Jucuara Group

Jucuara No. 2 Vein

With 44,251 tons from stopes and 1,400 tons from development, this vein was again the greatest single producer of the year. Stoping was confined to average grade blocks, so that the value of 88,398 tons left in the unbroken reserve is practically unchanged. Proposed development work on this vein below the Lower 650 leel is, of necessity, indefinitely postponed, pending the arrival of pumping equipment.

Jucuara No. 4 Vein

Of the 1,939 tons extracted, 1,377 tons were from development operations. An unbroken reserve of 13,241 tons of good grade remains.

Old Mine Group

Candelaria Vein

Mention has been made elsewhere in this report of the cutting of a parallel vein and to the south of the main Candelaria. 978 feet of drifting and raising disclosed ore of good gold content, but the limited width reduces minable values to 2,605 tons of $5.00 ore. 1,575 tons were mined, all from development. When it becomes possible to get proper new stoping equipment, this vein can probably be mined to a better grade than indicated.

Colonia Vein No. 1

Continuous development throughout the year, on the Upper 550, Zero, and Lower 200 levels, added ore of good gold content and realized an important increase in the reserve which now shows 107,002 tons at 13 ounces silver and .18 ounce gold per ton as against a tonnage of 76,534 for the previous year. Development yielded 6,818 tons of the total 9,026 tons produced. The lower and lateral limits are now well defined, but some additional tonnage should result from development now in progress above the Upper 500 level.

Culebra Veins Nos. 1 *and* 2, *and Culebra Stringer*

These veins, worked in conjuction, produced 4,770 tons, of which 3,914 were derived from development operations. Any appreciable tonnage from future development on the No. 2 vein is not expected, as the lateral limits are apparently reached on all levels, with the exception of the Lower 200 and Lower 300. In the Active List the No. 2 vein remains relatively unchanged. The No. 1 vein shows an increase from 1,994 tons to 23,375 of low grade, including the Culebra Stringer.

Guadalupe Vein

From old workings on the Lower 650 level in Blocks 52 and 53, two raises were driven connecting with the Lower 500 level. Ore of fair grade was exposed in these raises which, combined with known fair grade ore on the Lower 500 level, permitted an addition of 2,167 tons to the active reserve. Development produced 507 tons.

Nueva Vein

On the Lower 400 level 430 feet of drifting east and west, commencing from the crosscut south from the Colonia and

in Block 43, exposed ore of comparatively low grade. Two raises driven from Blocks 45 and 44 in the drift west opened up ore of fair grade to the Lower 300 level. By means of the raises driven to the Lower 300, previously blocked out ore above this level is now easily accessible and permits the inclusion of 6,919 tons of 9 ounces silver and .11 ounce gold per ton in the active reserve. 760 tons were produced from development. Some ore below the Lower 300 is included in Inactive Reserves.

Southwest No. 1 Vein

The extraction of 5,969 tons from stopes now depletes this vein to the extent that nothing further can be included in the Active Reserves at this time.

Southwest No. 2 Vein

Steady stoping produced 9,170 tons. A small tonnage of 7,207 of fair grade is shown in the unbroken reserve.

Southwest No. 3 Vein

A small tonnage of 1,489, all from stopes, leaves 13,783 tons on the Active List.

Southwest No. 6 Vein

6,927 tons were taken from stopes. 1,411 tons of good grade remain.

Southwest No. 10 Vein

Exposure of good grade ore by drifting and raising on the Lower 300 level made possible an appreciable addition to the reserve of this vein which now shows 9,444 tons at 11 ounces silver and .07 ounce gold per ton. 1,019 tons were obtained from development.

Miscellaneous Group

Santa Gertrudis No. 1 Vein

Of the 9,198 tons produced, 8,471 were from stoping operations. An unbroken reserve is left of 29,064 tons of low grade.

Veta No. 4 South

Continuation of the good ore opened up in Block 63 on the Lower 200 level was discovered in Block 62 by crosscut-

ting and drifting to the northeast, where a further length of 100 feet of good ore has been developed to date. Drifting also to the northeast, on the Zero level, entered the upward continuation of the good values exposed on the Lower 200 level, thus allowing an addition to the reserve, which now shows 27,990 tons or an increase of 5,523 tons over that shown previously. The exposure of this good grade ore on the Lower 200 level now indicates that the crosscut on the Lower 300 level, stopped in Block 67, will be continued to cut any possible downward extension of this ore. 823 tons were produced, all from development.

Other Veins

The remaining tonnage of 1,071 mined was contributed by old fills, and the following veins: Catalina, Jucuara No. 3, Northwest, Rosario, Santa Gertrudis No. 2, San Miguel North, and Southwest No. 7.

General Mine Comments

The only veins which show promise, through further development, of partially offsetting depletion are the Colonia No. 1, the Jucuara No. 1 branches, Salvador, Southwest No. 10, Culebra No. 1 and Jucuara No. 2. The last named cannot be further developed this year as prospects lie below water level and no equipment is available with which to carry on that work. Chances of developing new ore in any of these veins comparable in grade to even the present average of reserves are unfavorable. Only a limited tonnage of new ore can be expected.

The remaining territory to be investigated for new veins when conditions permit, is as follows:

Between the Colonia and Concepcion veins on the Lower 300 level.

Territory on both sides of the Upper 150 West crosscut.

Territory east of the Junction of the Candelaria and Colonia veins into which the Nueva vein extends eastward.

Territory west of the Southwest vein at preferably the Upper 450 level.

Territory north and east of the Jucuara No. 1 at a higher elevation than the Upper 450 level.

Ore Production

The detail of ore production, Annex "D", is summarized below, compared to three previous years.

	1942	1941	1940	1939
From Stoping (Tons)	162,598	152,874	151,153	147,281
From Development (Tons)	28,749	33,687	33,575	31,567
Total Tons	191,347	186,561	184,728	178,848

16% of production from development as against 18.1% the previous year shows the present downward trend. Indications are that 1943 will show a further decrease and that the resulting ore will be lower grade.

General

All power units continued to operate efficiently with the exception of the New San Juancito unit installed in 1940, for which we are awaiting some needed equipment.

Delays in receiving supplies and equipment, due to wartime conditions, has called for especial efforts on the part of our staff, whose loyalty in the face of these conditions has been admirable. Grateful acknowledgment is hereby made of all their efforts.

Respectfully submitted,

K. H. MATHESON,
General Manager.

Annex "A"—Active Ore Reserves December 31, 1942

Estimated Reserves (13 & 14 cu. ft. per ton)	Average Width Feet Vein	Waste	Stope	Tons Ore & Waste	Av. Troy Ozs. Per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Independencia Group								
San Blas No. 2	1.01	1.72	2.73	18,070	10	.07	181,095	1,349
Salvador Group								
Salvador	1.83	1.67	3.50	28,577	16	.04	460,288	1,012
Jucuara No. 1 (Fortuna)	2.42	1.52	3.94	137,209	21	.04	2,935,115	5,329
Fortuna—North	1.87	1.49	3.36	2,630	21	.04	54,769	105
Fortuna—Vein	2.10	1.40	3.50	4,192	12	.03	49,891	119
Carmen No. 1	3.00	1.50	4.50	4,895	14	.04	67,544	176
Jucuara Group								
Jucuara No. 2	2.77	2.38	5.15	88,398	21	.24	1,812,439	21,605
Jucuara No. 3	1.73	2.11	3.84	10,204	12	.26	118,166	2,625
Jucuara No. 4	2.17	1.78	3.95	13,241	24	.09	314,764	1,147
Jucuara No. 5	2.60	1.90	4.50	2,160	14	.10	31,200	212
Santa Fe Group								
Santa Fe No. 1	2.04	1.54	3.58	15,582	17	.23	267,319	3,526
Santa Fe No. 2	2.51	2.84	5.35	46,446	45	.43	2,101,593	19,922
Santa Fe No. 3	2.35	1.65	4.00	6,230	32	.36	201,688	2,246
San Benito No. 1	1.31	1.69	3.00	12,225	17	.13	207,928	1,558
San Benito No. 2	1.76	1.28	3.04	33,035	22	.25	735,533	8,394
Old Mine Group								
Catalina No. 2	1.77	1.23	3.00	3,612	20	.03	71,731	93
Capitana	.63	2.37	3.00	4,639	5	.18	20,960	823
Colonia No. 1	1.43	2.03	3.46	107,002	13	.18	1,436,500	18,928
Colonia No. 2	1.38	1.62	3.00	1,602	11	.10	17,541	163
Culebra No. 1	1.54	1.46	3.00	23,375	14	.03	330,515	658
Culebra No. 2	1.83	1.25	3.08	18,591	17	.06	319,049	1,048
Culebra—Stringer	1.38	1.62	3.00	5,008	11	.03	54,704	169
Guadalupe	1.88	1.12	3.00	2,167	12	.09	26,846	205
Nueva (Part)	.84	2.16	3.00	6,919	9	.11	61,012	760
North West	1.26	1.74	3.00	1,212	15	.14	17,815	168
Rosario No. 2	2.19	.81	3.00	2,245	9	.12	21,307	279
South West No. 2	2.32	1.68	4.00	7,207	12	.07	88,147	478
South West No. 3	1.50	3.00	4.50	13,783	14	.04	196,674	488
South West No. 4	1.59	2.91	4.50	7,565	28	.11	212,036	827
South West No. 5	2.12	1.88	4.00	2,253	19	.05	42,862	113
South West No. 6	1.19	1.31	2.50	1,411	19	.04	27,323	54
South West No. 7	1.39	1.61	3.00	10,678	16	.12	168,668	1,279
South West No. 10	1.68	1.82	3.50	9,444	11	.07	105,412	690
San Joaquin	1.00	2.00	3.00	3,538	19	.28	68,717	987
Termopilas	1.67	1.62	3.29	6,464	14	.13	90,991	832
Other Veins								
Veta No. 4 South	1.36	1.64	3.00	27,990	19	.03	534,794	800
Veta No. 4 North	1.73	1.27	3.00	2,712	14	.04	39,100	109
Santa Gertrudis No. 1	1.60	1.47	3.07	29,064	15	.10	428,816	2,883
Santa Gertrudis No. 2	1.56	1.44	3.00	946	8	.06	7,380	54
				722,521	19.28	.1415	13,928,232	102,213

Broken Ore In Stopes

(21.0 cu. ft. per ton)

Veins

Culebra No. 1	200
Fortuna	1,152
Independencia	578
Jucuara No. 1	21,569
Jucuara No. 2	446
Jucuara No. 4	20
Salvador	4,685
San Benito No. 1	89
San Benito No. 2	2,578
Santa Fe No. 1	14,859
Santa Fe No. 2	1,057
Santa Gertrudis	847
Mine Storage Chutes	2,269
Mill Ore Bin	467
TOTAL	50,816

Summary Active Reserves

	Tons of Ore & Waste	Av. Ounces Per Ton		Total Ounces	
		Ag.	Au.	Ag.	Au.
Estimated Ore (at 13 & 14 cu. ft. per ton)	722,521	19.28	.1415	13,928,232	102,213
Broken Ore Reserves (at 21.0 cu. ft. per ton)	50,816	23.00	.0900	1,168,768	4,573
Total Active Reserves as of Jan. 1, 1943	773,337	19.52	.1381	15,097,000	106,786

Note: While it is inherently probable that the tonnages and grades when actually mined from these individual veins will vary somewhat, up or down, from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

Annex "B" — Inactive Ore Reserves

Estimated Reserves (13 cu. ft. per ton) *Veins*	Tons of Ore & Waste	Av. Ounces Per Ton		Total Ounces	
		Ag.	Au.	Ag.	Au.
Esperanza (South San Miguel Extension South)	5,481	14.	.04	74,900	195
Porvenir	2,088	13.	.03	27,189	53
Nueva (Part)	4,269	9.	.09	37,746	374
South San Miguel	11,436	14.	.06	155,419	728
Candelaria—Branch No. 1	2,605	6.	.07	15,012	175
TOTAL	25,879	12.	.06	310,266	1,525

Annex "C"

Veins & Groups	Drifts	Crosscuts	Raises & Winzes	Total Feet
Independencia Group				
Independencia	179	59	26	264
San Blas No. 2	146	78	....	224
Salvador Group				
Salvador	710	313	253	1,276
Jucuara No. 1 (Fortuna)	852	446	1,181	2,479
Carmen	326	24	146	496
Jucuara Group				
Jucuara No. 2	293	1,144	457	1,894
Jucuara No. 3	.....	.....	125	125
Jucuara No. 4	379	44	420	843
Santa Fe Group				
Santa Fe No. 1	198	152	97	447
Santa Fe No. 2	.....	23	154	177
San Benito No. 1	881	568	349	1,798
San Benito No. 2	101	.....	11	112
Old Mine Group				
Candelaria No. 1	557	.....	421	978
Catalina No. 2	24	1,199	35	1,258
Colonia No. 1	2,900	2,433	3,151	8,484
Concepción	.....	281	.....	281
Culebra No. 1	1,205	180	1,151	2,536
Culebra No. 2	451	688	142	1,281
Culebra—Stringer	437	48	106	591
Guadalupe	114	.....	253	367
Nueva	349	.....	256	605
Rosario	.....	.....	97	97
San Miguel—Group South	57	.....	.....	57
San Miguel—North	.....	.....	76	76
South West No. 1	126	414	277	817
South West No. 2	.....	.....	17	17
South West No. 3	.....	98	44	142
South West No. 7	.....	136	65	201
South West No. 10	525	51	246	822
Other Veins				
Veta No. 4 South	385	85	126	596
Santa Gertrudis No. 1	173	85	768	1,026
Santa Gertrudis No. 2	.....	.....	93	93
Shaft Raises				
Shaft No. 8	.....	.....	555	555
	11,368	8,549	11,098	31,015

Annex "D"

Ore Production — 1942 from Stoping Operations

Veins	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Independencia Group													
Independencia	198	196	223	488	549	692	739	351	317	388	232	.....	4,373
San Blas No. 2	294	183	.....	.....	22	207	189	203	255	175	104	.....	1,632
Salvador Group													
Salvador	2,575	2,609	2,676	1,380	1,544	1,652	2,330	2,119	897	1,658	2,219	2,846	24,505
Jucuara No. 1 (Fortuna)	811	1,154	434	663	648	1,256	1,075	1,323	1,380	1,409	1,846	1,869	13,868
Fortuna	.....	173	252	7	.....	.....	.....	.....	.....	.....	.....	.....	432
Carmen	671	492	738	585	561	498	453	383	536	540	507	515	6,479
Jucuara Group													
Jucuara No. 2	3,374	2,358	3,593	4,756	4,842	4,242	4,042	4,249	3,681	3,045	2,986	3,083	44,251
Jucuara No. 4	379	62	.....	.....	.....	.....	.....	.....	.....	.....	.....	121	562
Santa Fe Group													
Santa Fe No. 1	870	802	1,186	587	655	819	1,382	1,653	1,906	1,084	921	776	12,641
Santa Fe No. 2	243	172	1,041	1,073	1,155	1,318	1,273	224	13	639	700	1,080	8,931
Santa Fe No. 3	107	.....	47	.....	.....	130	223	7	22	.....	.....	.....	536
San Benito No. 1	458	369	463	638	1,049	77	.....	.....	.....	27	298	12	3,391
San Benito No. 2	365	336	94	718	541	457	342	83	867	603	142	721	5,269
Old Mine Group													
Catalina No. 2	.....	77	.....	.....	.....	.....	.....	.....	9	.....	.....	.....	86
Colonia No. 1	.....	118	251	302	253	199	115	112	148	184	442	84	2,208
Culebra No. 1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	311	311
Culebra No. 2	.....	.....	.....	.....	.....	.....	.....	.....	.....	144	69	.....	213
Culebra Stringer	.....	33	299	.....	.....	.....	.....	.....	.....	.....	.....	.....	332
North West	.....	.....	.....	.....	.....	.....	.....	.....	.....	75	78	60	213
South West No. 1	1,102	760	735	878	534	581	399	274	193	162	329	22	5,969
South West No. 2	998	532	804	742	509	475	565	488	722	1,083	1,052	1,200	9,170
South West No. 3	.....	.....	.....	.....	.....	.....	65	443	22	244	319	396	1,489
South West No. 6	700	588	598	807	620	556	562	453	497	583	518	445	6,927
Other Veins													
Santa Gertrudis No. 1	148	179	352	391	938	852	743	1,256	1,171	1,020	667	754	8,471
Old Fills	2	56	44	40	62	.....	.....	52	54	29	.....	.....	339
STOPING TOTALS	13,295	11,249	13,830	14,055	14,482	14,011	14,497	13,673	12,690	13,092	13,429	14,295	162,598

Annex "D"

Ore Production — 1942 from Development Operations

Veins	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Independencia Group													
Independencia	23	18	130	50	.....	.....	.....	.....	.....	.....	.....	6	227
Salvador Group													
Salvador	.....	.....	.....	.....	.....	.....	.....	124	224	70	314	703	1,435
Jucuara (Fortuna)	341	195	.....	.....	29	286	331	460	383	696	887	264	3,872
Carmen No. 1	38	225	118	155	23	.....	.....	19	13	.....	.....	.....	591
Jucuara Group													
Jucuara No. 2	307	630	330	73	.....	.....	.....	9	.....	.....	.....	51	1,400
Jucuara No. 3	.....	.....	.....	.....	.....	.....	59	3	.....	.....	.....	.....	62
Jucuara No. 4	106	145	305	191	285	345	.....	.....	.....	.....	.....	.....	1,377
Santa Fe Group													
Santa Fe No. 1	8	.....	.....	.....	.....	.....	.....	72	97	6	72	24	279
Santa Fe No. 2	32	21	.....	.....	16	160	158	108	10	.....	.....	.....	505
San Benito No. 1	113	124	84	.....	.....	.....	32	407	376	311	127	195	1,769
San Benito No. 2	68	41	.....	.....	.....	77	.....	.....	.....	.....	.....	.....	186
Old Mine Group													
Candelaria	.....	.....	.....	76	209	153	135	18	277	243	322	142	1,575
Catalina No. 2	.....	.....	.....	.....	.....	.....	.....	.....	.....	79	68	52	199
Colonia No. 1	961	957	804	839	843	516	271	365	366	300	415	181	6,818
Culebra No. 1	202	213	361	458	623	204	186	167	315	434	115	112	3,390
Culebra No. 2	57	20	.....	.....	.....	.....	.....	12	.....	5	.....	.....	94
Culebra Stringer	97	95	.....	.....	.....	.....	.....	15	44	.....	173	6	430
Guadalupe	.....	.....	.....	.....	.....	.....	.....	115	100	150	58	84	507
Nueva	.....	.....	.....	.....	.....	.....	167	35	211	245	102	.....	760
Rosario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66	133	199
San Miguel North	.....	.....	67	17	.....	.....	.....	.....	.....	.....	.....	.....	84
South West No. 1	96	91	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	193
South West No. 7	64	86	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	150
South West No. 10	.....	.....	.....	.....	.....	122	239	47	113	.....	175	323	1,019
Other Veins													
Veta No. 4 South	98	88	.....	.....	11	45	18	147	394	22	.....	.....	823
Santa Gertrudis No. 1	220	86	102	4	.....	.....	.....	26	.....	70	40	179	727
Santa Gertrudis No. 2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78	.....	78
DEVELOPMENT TOTALS	2,831	3,035	2,301	1,863	2,045	1,908	1,596	2,149	2,923	2,631	3,012	2,455	28,749
STOPING TOTALS	13,295	11,249	13,830	14,055	14,482	14,011	14,497	13,673	12,690	13,092	13,429	14,295	162,598
GRAND TOTALS	16,126	14,284	16,131	15,918	16,527	15,919	16,093	15,822	15,613	15,723	16,441	16,750	191,347

Annex "E"—Tonnage Mined From October 1, 1907 to January 1, 1943

Veins	Total Incl. Stoping, Devel. and Filling Oct. 1, 1907 to Dec. 31, 1941	Total Incl. Stoping, Devel. and Filling for Year 1942	Grand Total Incl. Stoping, Devel. & Filling, Jan. 1, 1943
Buena Ventura	98,490		98,490
Candelaria Group	166,573	1,575	168,148
Capitana	60,967		60,967
Carmen No. 1	48,711	7,070	55,781
Carmen No. 2	1,105		1,105
Catalina	6,587		6,587
Catalina No. 2	462	285	747
Colonia No. 1	74,183	9,026	83,209
Colonia No. 2	665		665
Concepción	19,342		19,342
Crisanta	7,410		7,410
Culebra No. 1	108,322	3,701	112,023
Culebra No. 2	4,553	307	4,860
Culebra Stringer		762	762
Esperanza	8,710		8,710
Fortuna Group	101,983	432	102,415
Guadalupe	61,177	507	61,684
Independencia	299,784	4,600	304,384
Jucuara No. 1 (Fortuna)	284,049	17,740	301,789
Jucuara No. 2	201,824	45,651	247,475
Jucuara No. 3	39,615	62	39,677
Jucuara No. 4	33,089	1,939	35,028
Jucuara No. 5	1,901		1,901
56 Fault Vein	4,954		4,954
North	4,647		4,647
North West	89,984	213	90,197
Nueva	28,147	760	28,907
Porvenir	2,985		2,985
Rosario	151,027	199	151,226
Rosario No. 2	641		641
Salvador	658,455	25,940	684,395
San Benito No. 1	118,610	5,160	123,770
San Benito No. 2	28,630	5,455	34,085
San Blas No. 1	6,938		6,938
San Blas No. 2	14,663	1,632	16,295
San Joaquin	71,649		71,649
San Luis	2,389		2,389
San Miguel North	175,434	84	175,518
San Miguel Group—South	125,855		125,855
Santa Fe Main Vein	189,624		189,624
Santa Fe No. 1	44,822	12,920	57,742
Santa Fe No. 2	82,284	9,436	91,720
Santa Fe No. 3	47,103	536	47,639
Santa Gertrudis No. 1	39,860	9,198	49,058
Santa Gertrudis No. 2	1,794	78	1,872
Socorro	22,592		22,592
South West No. 1	101,798	6,162	107,960
South West No. 2	7,338	9,170	16,508
South West No. 3	1,666	1,489	3,155
South West No. 4	4,181		4,181
South West No. 5	422		422
South West No. 6	933	6,927	7,860
South West No. 7	1,659	150	1,809
South West No. 9	6		6
South West No. 10	175	1,019	1,194
Termopilas	6,898		6,898
West	97,005		97,005
Veta No. 4 North	11,010		11,010
Veta No. 4 South	7,994	823	8,817
Ore from Development	63,599		63,599
Miscellaneous	7,238	339	7,577
	3,854,511	191,347	4,045,858

Summary to Annex "E"—From October 1, 1907 to January 1, 1943

From Stoping	3,153,902
From Development	654,358
From Fills	237,598
TOTAL	4,045,858

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NEW YORK AND HONDURAS ROSARIO MINING COMPANY



SIXTY-THIRD ANNUAL REPORT
NINETEEN HUNDRED AND FORTY-THREE

NEW YORK AND HONDURAS ROSARIO MINING COMPANY

OFFICERS

April 7, 1943 to April 5, 1944

WM. A. PRENDERGAST, *President*

LEWIS L. CLARKE, *Chairman of Board* — W. C. LANGLEY, *Treasurer*

H. A. GUESS, *Vice-President* — J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

April 7, 1943 to April 5, 1944

LEWIS L. CLARKE, *Chairman*

H. A. GUESS — LESTER S. OPPENHEIMER

DR. J. RALPH JACOBY — WM. A. PRENDERGAST

HERBERT A. KAUFMANN — M. F. SOTO

W. C. LANGLEY — AMBROSE G. TODD*

RICHARD H. VALENTINE

*Resigned—Julian B. Beaty elected January 12, 1944

EXECUTIVE COMMITTEE

April 7, 1943 to April 5, 1944

LEWIS L. CLARKE, *Chairman* — DR. J. RALPH JACOBY

H. A. GUESS — M. F. SOTO

AMBROSE G. TODD (Resigned)

WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

NOTICE TO STOCKHOLDERS

STATEMENT MADE PURSUANT TO THE "RULES RELATING TO SOLICITATION OF PROXIES"

of the

SECURITIES AND EXCHANGE COMMISSION

Stockholders are advised that proxies for the Company's annual meeting, to be held on April 5, 1944, will be requested at a later time. It is expected that the required proxy statement will be sent to stockholders on or about March 15, 1944.

PRESIDENT'S REPORT

March 1, 1944.

To the Stockholders of the
New York and Honduras Rosario Mining Company:

Despite the unavoidable effects that war conditions impose upon industry, we believe that the outcome of our "Sixty-Third Year" is gratifying. We have endeavored to meet these conditions in that spirit of cooperative patriotism which is characteristic of American business. Operating in a country which to us is only geographically foreign, we have enjoyed a perfect concert of relationship with the Government and people of Honduras. We tender to His Excellency, President Tiburcio Carias A., and the people of Honduras, our cordial felicitations.

Scope of this Report:

We stated last year that in the interest of economy we were omitting from the Annual Report considerable data formerly published. Especially because of the necessity of conserving paper, we are this year excluding some additional tables, but this Report gives definite information upon every material subject pertaining to operations.

General Manager's Report (Pages 14 to 24):

We request your careful study of this Report giving in detail the work performed in the Mine, and particularly the information regarding "Mine Reserves" (Pages 14, 22 and 24).

Probable Earnings for 1944:

The estimate for the year 1944, based upon

(1) The grade of ore to be used;
(2) No undue rise in production costs;
(3) Reasonable transportation facilities, and
(4) The present price of silver,

is $2.60 per share. In view of the uncertainties and perplexities of War time, we prefer to treat this question conservatively.

Neptune Gold Mining Company:

This Company, on December 12th, 1943, redeemed 50% of its outstanding 5% Income Debenture Notes due 1948, with interest to December 31, 1943. The amount of these Debentures held by us was $570,267.57. This redemption reduces our present holdings to $285,133.78. Interest on all of the Company's Debentures has been paid to December 31, 1943.

In accordance with custom, we will mail to you a copy of the Annual Report of the Neptune Gold Mining Company promptly when issued.

Newly Acquired Properties:

In our Quarterly Statement of April 28, 1943, you were advised that the Company had purchased two properties, one, El Mochito, a silver-lead property in the Department of Santa Barbara, Honduras, the purchase price of which was $75,000.00. The other is the El Dorado, a gold property located in the District of Cabanas in the Republic of El Salvador, the purchase price of which was $27,160.00. These purchase prices, with development costs up to December 31, 1943, represent a total outlay to that date of $172,066.52.

The Company has also acquired, through denouncement, a silver property known as Caliche, adjacent to El Mochito.

It was stated in the April Report, and we desire to repeat this, that war conditions will delay the progress of these properties to a production basis.

During the year 1943, the Company has followed its general policy of examining, or making investigations, into the status of other properties. These include a considerable number of properties in Honduras and some in the United States of America.

Tribute to Mr. Ambrose G. Todd

To the great regret of the Officers and Directors of this Company, Mr. Todd resigned as a Director on December 3rd, 1943. He has been associated with us as Counsel and Director from 1912. His retirement, because of illness, is deeply deplored. I deal in no trite encomium when I say that it is rarely in the experience of either professional or business men, that one has the pleasure of the companionship of a man whose charm of personality, and exquisite appreciation of all the amenities of social and business intercourse, are more highly exemplified than in Mr. Todd.

General Financial and Statistical Matters:

The profits for the year 1943, as shown by the Income and Profit and Loss Statement, and also the Statement of Surplus, after deducting all charges, were $573,020.07, equal to $3.08 per share. This amount contains an item of $29,655.72, which represents the capitalization in 1943 of outlays incurred on the El Dorado Mine in 1942, with a consequent credit to Income Account. The profits for the year 1943, derived solely from the operations of the mining property, and other company transactions, were $543,364.35, equal to $2.92 per share. These last figures

are a truer index of the results of our business for the year 1943, than the gross figures first quoted, and a better guide as to the possibilities of this enterprise at the present time.

There was paid in dividends from earnings for the year 1943, $491,924.80, equal to $2.65 per share, compared with $473,441.60, equal to $2.55 per share in 1942.

Income from Investments in 1943 was $97,909.48, compared with $91,846.11 in 1942.

On December 31, 1943, we held "marketable securities" which cost $1,795,165.38, and the market value of which on that date was $1,765,231.37, a difference between cost and market value of $29.934.01, or 1-69/100%.

The Bullion Production from the organization of the Company to December 31, 1943, amounted to $69,307,963.00, and the dividends paid therefrom were $17,141,539.00.

There is submitted with this Report and made a part hereof:

1. A Comparative Statement of Operations for the years 1943 and 1942 (page 6), and other general statistics (page 24).
2. A Comparative Income and Profits and Loss Statement for the years ended December 31, 1943, and December 31, 1942.
3. A Balance Sheet for the year ended December 31, 1943.
4. A Statement of the Surplus Account for the year ended December 31, 1943.
5. A List of the Securities held by this Company December 31, 1943.

Respectfully submitted,

WM. A. PRENDERGAST,

President.

Comparative Statement of Operations

Years ended December 31, 1943 and 1942

	Year 1943	Year 1942	Increase Decrease*	
Tons of ore milled	177,200	191,400	14,200	*
Average tons milled per day, full running time	532	543	11	*
Ounces of silver recovered	3,161,901.09	3,478,831.32	316,930.23	*
Number of ounces of silver recovered per ton of ore	17.84368	18.17571	.33203	*
Silver recovered—percentage	91.8825	91.5272	.3553	
Sales value of silver recovered	$1,422,855.56	$1,414,700.33	$ 8,155.23	
Average sales value of silver per ounce	$ .45000	$ .40666	$ .04334	
Average cost of silver per ounce**	$ .22701	$ .18519	$ .04182	
Average profit on silver per ounce**	$ .22299	$ .22147	$ .00152	
Average sales value of silver recovered per ton of ore	$ 8.02966	$ 7.39132	$ .63834	
Average cost of silver per ton of ore**	$ 4.05080	$ 3.36605	$ .68475	
Average profit on silver recovered per ton of ore**	$ 3.97886	$ 4.02527	$ .04641	*
Ounces of gold recovered	18,093.727	22,089.062	3,995.335	*
Number of ounces of gold recovered per ton of ore	.10211	.11541	.01330	*
Gold recovered—percentage	93.2423	92.7800	.4623	
Sales value of gold recovered	$ 633,280.43	$ 773,117.13	139,836.70	*
Average sales value of gold per ounce	$ 35.00	$ 35.00	....	
Value of gold recovered per ton of ore	$ 3.57382	$ 4.03927	$ .46545	*
Number of bars of bullion shipped from mine	1,789.	2,026.	237.	*
Ratio of gold to silver	1:175	1:158	:017	
Total tons treated by mill from 1912 to date	4,056,908	3,879,708	177,200	

** After credit for sales value of gold recovered.

Income and Profit and Loss Statement
Years ended December 31, 1943 and 1942

	Year 1943	Year 1942	Increase Decrease*
Production of gold and silver	$2,056,135.99	$2,187,817.46	$131,681.47*
Less freight and other expenses on bullion	128,732.57	156,201.82	27,469.25*
OPERATING INCOME	$1,927,403.42	$2,031,615.64	$104,212.22*
Operating expenses	1,129,657.46	1,171,241.67	41,584.21*
MINE OPERATING PROFIT	$ 797,745.96	$ 860,373.97	$ 62.628.01*
New York administrative and general expenses	92,693.05	89,935.73	2,757.32
NET OPERATING PROFIT	$ 705,052.91	$ 770,438.24	$ 65,385.33*
Add income from investments, etc.	97,909.48	91,846.11	6,063.37
	$ 802,962.39	$ 862,284.35	$ 59,321.96*
Less other deductions from income (Note A)	17,786.62	65,764.43	47,977.81*
PROFIT BEFORE TAXES ON INCOME AND PROVISION FOR DEPLETION	$ 785,175.77	$ 796,519.92	$ 11,344.15*
Taxes on income—estimated (Note B):			
Provision for the year:			
Federal normal income tax and surtax	176,434.10	177,325.16	891.06*
Government of Honduras, C.A.	28,565.90	32,674.84	4,108.94*
TOTAL TAXES	$ 205,000.00	$ 210,000.00	$ 5,000.00*
	$ 580,175.77	$ 586,519.92	$ 6,344.15*
Appropriated for depletion (Note C)	36,811.42	22,963.95	13,847.47
	$ 543,364.35	$ 563,555.97	$ 20,191.62*
Add credit arising from capitalization of expenditures made during prior year on new mining property purchased in 1943	29,655.72	....	29,655.72
NET PROFIT FOR YEAR	$ 573,020.07	$ 563,555.97	$ 9,464.10
NOTE A—Other deductions from income include:			
Investigations of outside properties	$ 1,488.34	$ 46,637.07	$ 45,148.73*
Federal capital stock tax, New York State franchise tax and New York City gross receipts tax	8,678.71	8,493.55	185.16
Obsolete inventory written off.	2,752.37	2,662.91	89.46
Business association dues, subscriptions, and donations	2,084.34	1,145.00	939.34
Interest paid	2,143.56	....	2,143.56
Distributions made in prior years on dividend arrears certificates of Iowa Southern Utilities Company of Delaware, now applied against book carrying value of that investment	....	6,125.00	6,125.00*
Sundry	639.30	700.90	61.60*
	$ 17,786.62	$ 65,764.43	$ 47,977.81*

NOTE B—No provision is required for federal excess profits tax.
NOTE C—Beginning with the year 1932, depletion has been taken on tax returns on a percentage basis in accordance with respective revenue acts. Entries recording depletion as they affect the older portion of the property are carried in the general accounts. Depletion deductions on ore mined from the newer discoveries, which newer discoveries are not carried on the books, are made for income tax purposes only.

BALANCE
DECEMBER

ASSETS

Current Assets			
Cash		$ 444,909.15	
Bullion at smelters and in transit—less allowance for expenses		332,867.69	
Marketable securities—at cost:			
United States Government bonds	$1,100,884.20		
Municipal bonds	174,755.74		
Public Authority bonds	52,645.87		
Domestic Corporation bonds	164,375.00		
Domestic Corporation stocks	302,504.57		
	$1,795,165.38		
Less allowance to reduce to aggregate quoted market prices	29,934.01		
	$1,765,231.37		
Interest accrued on bonds	5,443.75	1,770,675.12	
Broken ore in stopes and mill bins—at cost		210,806.68	
Inventories—materials and supplies—at cost		329,214.59	
TOTAL CURRENT ASSETS			$3,088,473.23
Investments and Other Assets			
Neptune Gold Mining Company, ten year 5% income debenture notes, due March 1, 1948, principal amount $285,133.78, and 5,100 shares of its capital stock of no par value—at cost		$ 285,133.78	
Sundry accounts receivable		3,910.23	289,044.01
Prepaid Items, Etc.			
Balance at December 31, 1942 of advance to Government of Honduras, C. A. under Decree No. 67	$ 196,204.89		
Less amount applicable to the year 1943—estimated	28,565.90	$ 167,638.99	
Inventories of supplies, prepaid insurance, taxes and other expenses		78,365.78	246,004.77
Buildings, Machinery and Equipment			
At cost		$2,341,073.27	
Less allowance for depreciation		1,936,585.57	404,487.70
Mines, Real Estate and Concessions			
At valuation originally established in 1880		$1,500,000.00	
Less allowance for depletion applicable thereto		1,232,705.48	
		$ 267,294.52	
New mining properties (El Dorado and El Mochito) and development expenses thereon—at cost		172,066.52	439,361.04
			$4,467,370.75

SHEET
31, 1943

LIABILITIES

Current Liabilities			
Drafts payable		$ 28,627.49	
Accounts payable		59,726.09	
Accrued taxes		6,500.00	
Federal taxes on income—estimated	$190,382.47		
Less United States Treasury tax notes purchased for payment of such taxes when due	39,000.00	151,382.47	
TOTAL CURRENT LIABILITIES			$ 246,236.05
Reserve for Contingencies			25,000.00
Capital Stock and Surplus			
Capital stock (par value $10.00 per share):			
Authorized and issued—188,367 shares		$1,883,670.00	
Less in treasury — 2,735 shares		27,350.00	
Outstanding 185,632 shares		$1,856,320.00	
Earned surplus		2,339,814.70	4,196,134.70
			$4,467,370.75

Statement of Surplus

Year ended December 31, 1943

EARNED SURPLUS

Balance at January 1, 1943		$2,172,585.49
ADDITIONS		
Net profit for the year	$573,020.07	
Restoring to earned surplus portion of reserve previously provided to adjust marketable securities to aggregate quoted market prices, not required at December 31, 1943 because of increase in aggregate quoted market prices of securities by this amount during year	118,733.07	691,753.14
		$2,864,338.63
DEDUCTIONS		
Dividends paid, totalling $2.65 per share:		
March 27, 1943—$ .50 per share	$ 92,816.00	
June 26, 1943— .65 per share	120,660.80	
Sept. 25, 1943— .65 per share	120,660.80	
Dec. 24, 1943— .85 per share	157,787.20	$491,924.80
Additional federal income taxes for the years 1938, 1939 and 1940, with interest thereon to December 31, 1942, paid under protest	32,599.13	524,523.93
Balance at December 31, 1943		$2,339,814.70

SURPLUS FROM APPRECIATION OF MINES

Balance at January 1, 1943	$ 304,105.95
DEDUCTION	
Elimination of balance in this account by writing off adjustment to Mine Valuation of $1,500,000.00 less depletion applicable thereto of $1,195,894.05 to December 31, 1942	304,105.95
Balance at December 31, 1943	$ —0—

Marketable Securities

December 31, 1943

	Par Value	Quoted Market Prices Dec. 31, 1943	
Bonds			
United States Government			
Treasury bonds:			
1¾% due June 15, 1948	$100,000.00	$101,250.00	
2% due September 15, 1953-1951	50,000.00	50,062.50	
2¼% due June 15, 1955-1952	50,000.00	50,796.88	
2¼% due June 15, 1956-1954	135,000.00	143,985.94	
2½% due March 15, 1958-1956	80,000.00	82,550.00	
2½% due June 15, 1967-1962	50,000.00	50,187.50	
2½% due Dec. 15, 1968-1963	100,000.00	100,093.75	
Certificates of Indebtedness:			
⅞% Series "B", due April 1, 1944	100,000.00	100,075.80	
⅞% Series "G", due December 1, 1944	285,000.00	285,272.75	
Savings bonds:			
2½% Defense Series "G", due May 1, 1953	50,000.00	48,100.00	
2½% Defense Series "G", due January 1, 1955	100,000.00	98,800.00	
New York City Bonds			
3% Corporate Stock for Transit Unification, Series R-31, due June 1, 1980	175,000.00	190,312.50	
Triborough Bridge Authority			
3¼% Sinking Fund Revenue Bonds, due February 1, 1980	50,000.00	50,750.00	$1,352,237.62
Domestic Railroad Bonds			
Chicago and North Western Railway Co., 1st and Ref. Mtge. 4½% Gold Bonds, due May 1, 2037	25,000.00	$ 12,312.50	
New Orleans, Texas and Mexico Railway Co., 1st Mtge. 5½% Gold Bonds Series "A", due April 1, 1954	25,000.00	18,406.25	
New York, Chicago and St. Louis R. R. Co., Ref. Mtge. Bonds Series "C" 4½%, due September 1, 1978	50,000.00	43,750.00	
St. Louis-San Francisco Railway Co., Prior Lien Mtge. 5% Gold Bonds, Series "B", due July 1, 1950	50,000.00	18,250.00	92,718.75
Domestic Public Utility Bonds			
Joplin Water Works Co., 1st Mtge. 5% Gold Bonds, Series "A", due March 1, 1957	25,000.00	26,375.00	26,375.00
(FORWARD)			$1,471,331.37

Marketable Securities—Continued

	Number of Shares	Quoted Market Prices Dec. 31, 1943	
(FORWARD)			$1,471,331.37
Stocks			
American Chicle Co., common stock, no par	500	$ 55,500.00	
American & Foreign Power Company Inc., $7.00 cumulative preferred stock, no par	500	36,000.00	
The Commonwealth and Southern Corp., $6.00 cumulative preferred stock, no par	550	43,725.00	
Florida Power and Light Co., $7.00 cumulative preferred stock, no par	400	43,800.00	
The Home Insurance Co., capital stock, par value $5.00 per share	1,500	45,562.50	
Iowa Southern Utilities Company of Delaware:			
Common stock, par value $15.00 per share	2,100	13,125.00	
Dividend arrears certificates on 500 shares of 7% cumulative preferred stock	500	4,750.00	
Jersey Central Power and Light Co., 5½% cumulative preferred stock, par value $100.00 per share	500	43,000.00	
Public Service Co. of Indiana, Inc., common stock, no par	500	8,437.50	293,900.00
Total market value at December 31, 1943			$1,765,231.37
United States Treasury Notes			
Purchased for payment of federal income taxes: Tax Series "C"—1946			$ 39,000.00
Other Investments (at cost)			
Neptune Gold Mining Company, ten year 5% income debenture notes due March 1, 1948, principal amount $285,133.78 and 5,100 shares of its capital stock of no par value			$ 285,133.78

Report of Auditors

To the Stockholders of
New York and Honduras Rosario Mining Company:

We have examined the balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY as of December 31, 1943, and the statements of profit and loss and surplus for the year then ended, have reviewed the system of internal control and the accounting procedures of the Company, including minutes of stockholders' and directors' meetings, and have examined or tested accounting records of the Company and other supporting evidence at its offices in New York and in Honduras, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary.

Cash, securities and bullion were verified by actual count, inspection of documents and by direct communication with custodian or depositaries.

In our opinion, the accompanying balance sheet and related statements of profit and loss and surplus present fairly the position of NEW YORK AND HONDURAS ROSARIO MINING COMPANY at December 31, 1943 and the results of its operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST.

New York, N. Y.
February 24, 1944.

GENERAL MANAGER'S REPORT

San Juancito, Honduras, C. A., January 1, 1944.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company:

The following report for the year 1943, embodying a resumé of operations and comparative essential data, is respectfully submitted for your consideration.

THE MINE

Ore Reserves

The following summary of Ore Reserves as of January 1, 1944, appears in detail on page 23.

Comparative Summary—Active Ore Reserves

Based on Silver at 45 cents and Gold at $35.00 per Troy Ounce

	Tons Ore Plus Waste	Av. Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
January 1, 1943	722,521	19.28	.1415	13,928,232	102,213
Broken Ore in Stopes	50,816	23.00	.0900	1,168,768	4,573
	773,337	19.52	.1381	15,097,000	106,786
January 1, 1944	689,430	18.28	.1349	12,602,230	93,005
Broken Ore in Stopes	58,749	24.00	.0800	1,409,976	4,700
	748,179	18.73	.1306	14,012,206	97,705
Decrease	25,158	.79	.0075	1,084,794	9,081

Comparative Summary—Inactive Ore Reserves

	Tons Ore Plus Waste	Av. Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
January 1, 1943	25,879	12.00	.06	310,266	1,525
January 1, 1944	14,443	11.00	.06	154,847	797
Decrease	11,436	1.00	...	155,419	728

Development and Operating Connections

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet
1942	11,368	8,549	11,098	31,015
1943	10,886	7,705	9,220	27,811
Decrease	482	844	1,878	3,204

Operating Crosscuts and Raises Below the Peña Blanca Level

Lower 200 Southwest No. 1

This crosscut, originally commenced in Block 74, was advanced 85 feet in a southeasterly direction. Nothing of interest was exposed over the distance driven, and the crosscut will be continued a further 100 feet to the Santa Gertrudis No. 1.

Lower 300 Jucuara No. 2

In Block 87 a crosscut was driven 357 feet in a southwesterly direction. At a distance of 45 feet a narrow branch of Jucuara No. 4 vein was cut. A drift on it exposed ore of good gold content, but over a length of 80 feet only. This vein is known as Jucuara No. 6.

At approximately 340 feet another vein of narrow width was cut. Development to the east and west exposed ore containing fair, but erratic values, over a distance of 140 feet. This vein has been called Jucuara No. 7. It requires further development before any statement can be made regarding its possibilities.

Lower 300 Jucuara No. 4

From the Jucuara No. 4, in Block 88, a crosscut was driven 183 feet northeast to cut the upward extension of veins exposed on the Lower 400 level. At 90 feet the first vein was encountered, and driving to the west exposed ore of excellent grade, averaging 1.5 feet wide. Development was commenced late in the year, and only 60 feet has been exposed on the strike. The vein is known as Jucuara No. 8. Further work is contemplated to define fully the extent of this ore body.

Lower 300 Salvador

A crosscut 313 feet in length was commenced in Block 71 to supply waste for stopes below, and driven east and northeast. Veins proved to be non-existent between the Salvador and Carmen veins.

Lower 300 Carmen

From the southeastern end of the Carmen a crosscut was commenced in Block 66 to try to pick up any extension of the Carmen in the disturbed eastern end. Over a distance of 168 feet, on a course northeast and paralleling the Veta 4 South ore body, nothing of interest was disclosed. Continuation of this crosscut to the east is contemplated in order to open up the Veta 4 South at this elevation.

Lower 400 Jucuara No. 1

From the western end of this vein a crosscut was driven 71 feet in a westerly direction to cut the downward extension of the

Southwest Fault vein. Where cut, values proved to be disappointing and work was discontinued. Some low grade ore exists on the level above, but is relatively unimportant.

On this level, and from the same vein, a crosscut started in Block 77 was driven northeast 118 feet to cut a branch vein found when stoping from the Lower 400. A vein was exposed, but not carrying values as expected, and further work was, therefore, suspended.

Lower 400 Jucuara No. 2

To intersect the possible downward extension of the Jucuara No. 6, mentioned above, on the Lower 300, a crosscut was commenced in Block 87. After driving 95 feet on a southwesterly course, and no vein being discovered, the crosscut was stopped. This will be continued, when stope filling is needed, to determine if the values found on the Lower 300 level in the Jucuara No. 7 extend to this horizon.

Another crosscut, started some years ago in Block 88 to reach any possible downward extension of a vein cut in Block 85 by the Southwest Branch of the Upper 150 West Crosscut, was driven intermittently only 81 feet, as waste rock was required for stopes. Active driving will be resumed only when restrictions on imports have been removed. It is considered a reasonably good exploration crosscut.

Lower 500 Salvador

Starting in Block 73, a crosscut was driven 180 feet south to make the Salvador Branch 4 ore accessible below the Lower 400 level. At a distance of 150 feet the vein was intersected. Drifting to the west exposed ore of medium grade, which permitted a small addition to the active reserves in this branch.

Operating Crosscuts and Raises Above the Peña Blanca Level

Upper 650 Jucuara No. 1

A search for the northwest continuation of Branch No. 1 resulted in alternate drifting and 138 feet of crosscutting. Further extension of the Jucuara No. 1 Branch to the northwest does not appear likely.

Upper 550 Colonia

To provide fill for the one Colonia stope mined during 1943, it was decided to drive a crosscut 362 feet in Block 47 from the Colonia vein to the Crisanta. The latter was cut below the old Upper 600 ft. level opened in 1919. Nearly 500 feet of drifting shows scattered pockets of stoping ore, insufficient to be included in reserves this year.

Upper 550 Termopilas

Crosscutting due west from Block 37 failed to disclose anything of interest over a distance of 683 feet from the Termopilas and toward the Culebra vein. From this same block, 37, but in a northeasterly direction, a crosscut was driven 344 feet, paralleling the Rosario workings and to the south thereof. Failure to expose any veins caused work in this crosscut to be terminated.

Upper 450 Jucuara No. 1

To locate Branch 12, already developed on the Upper 650 and Upper 550 levels, a crosscut was driven 112 feet northeast in Block 43. As the vein was not found, the crosscut was stopped, and raises are now being driven from the crosscut to disclose to what point the vein extends downward from the Upper 550 level.

Upper 350 Jucuara No. 1

A crosscut commenced in Block 71 was driven 80 feet in a southerly direction to cut Salvador Branch No. 7, opened on the Upper 450 and 550 levels. Drifting and raising on the vein exposed ore of moderate grade and allowed a small increase of 2,766 tons to the active reserve under Salvador Branch No. 7.

Upper 350 Candelaria

In Block 44, and from the western end of Candelaria Branch No. 1, a crosscut was driven 195 feet on a southwesterly course to expose any possible ore bodies existing between the Candelaria and the Buena Ventura veins. Work in this crosscut has been suspended, pending more favorable working conditions.

Upper 250 Jucuara No. 1

For the purpose of locating the northern extension of the Fortuna vein at this level, a crosscut starting in Block 71 was driven 191 feet east and north. Efforts to disclose this extension being unsuccessful, the crosscut was discontinued.

Upper 150 Rosario

This crosscut, originally commenced in Block 45 to make the Candelaria No. 2, opened on the Upper 350 in 1942, accessible on the haulage level, was advanced 480 feet, turning from north to northeast in Block 44. A small stringer, which may be the Candelaria No. 2, was intersected before reaching the Candelaria proper where some old fill of fair grade was encountered. It is proposed to continue the crosscut, as conditions permit, to the Nueva vein.

Upper 150 Guadalupe

To prove the continuity downward of the Crisanta vein, a crosscut started in Block 49 was driven 257 feet in a northwesterly direction from the Guadalupe Crosscut. Results were disappoint-

ing. It is proposed to continue the crosscut a short distance beyond the point where the Crisanta vein should be.

Upper 150 Salvador

From Block 72 in the Salvador Branch No. 4 a crosscut northeast was driven 218 feet to cut an inaccessible branch vein from the main Salvador. Drifting 60 feet to the west on this branch exposed a strong fissure of good width, with occasional values showing, and further work on it is contemplated.

Upper 150 Santa Gertrudis No. 1

In Block 72 a crosscut was commenced and advanced 171 feet in a southeasterly direction. No veins were cut over the distance driven, but the crosscut will be continued toward the Catalina vein as waste is needed for the Southwest veins.

Miscellaneous Crosscuts

In the normal course of production operations additional short operating crosscuts were driven. Among them may be mentioned: Upper 700 Colonia to connect the uppermost level with the surface in Block 46; 80 feet north from the Jucuara No 1 on the Upper 650 ft. level started in Block 72; 84 feet northeast of Jucuara No. 1 on the Lower 400 ft. level in Block 82; 50 odd feet to join the Jucuara Nos. 4 and 6 on the Lower 300 ft. level in Block 86; 91 feet west from the Salvador on the Upper 450 ft. level in Block 71; 171 feet of miscellaneous crosscutting in the Southwest section and 130 feet of miscellaneous work on the Jucuara No. 1 and Salvador veins.

Vein Development and Stoping

Veins worked in 1943

Tons of ore sent to the Mill during 1943 totalled 177,209, of which 98% came from the following veins: Carmen, Colonia, Crisanta, Fortuna, Independencia, Jucuara Nos. 1, 2 and 4, Salvador, San Benito No. 2, Santa Fe Nos. 1 and 2, Santa Gertrudis No. 1, Southwest Nos. 2, 3, 5, 6 and 10, the remaining small percentage having been taken from the Candelaria, Catalina No. 2, Culebra No. 1, Culebra Stringer, Rosario, San Benito No. 1, Santa Fe Main, South San Miguel, Southwest Nos. 1, 4 and 7, and Termopilas veins. Of the 30 veins worked during the year, 9 produced from development sources alone.

Salvador Group
Salvador Vein

This vein was the third largest producer of the year, with 22,880 tons, of which 88½% came from stoping operations. An unbroken reserve of 25,648 tons of low grade ore remains.

Jucuara No. 1—Fortuna Vein

Of the 38,771 tons mined, 8,388 tons came from development sources. Due to steady development of branch veins on the upper levels, the blocked out reserve still shows 123,300 tons of good grade silver ore or only 13,909 tons less than the previous year.

Carmen Vein

The extraction of 6,026 tons, 96% from stopes, now leaves merely 2,943 tons of 10 oz. silver and .02 ounce gold per ton. Although of below average grade it is included in the active list, being easily accessible, and will be mined during the coming year.

Independencia Vein

Work on a limited scale produced 1,376 tons from stopes and 134 tons from development. It has been explained in previous reports that any appreciable tonnage cannot now be expected from this vein.

Santa Fe Group

San Benito No. 1 Vein

Development raises from the Lower 500 level permitted a small increase to the active list, resulting in a net 13,107 tons of good grade silver and gold ore. 280 tons were mined, all from development.

San Benito No. 2 Vein

2,651 tons were produced which, with the exception of 55 tons, were derived from stopes. 32,065 tons of good gold content remain in the active reserve.

Santa Fe No. 1 Vein

The steady stoping program carried on throughout the year in the better sections of this vein has considerably depleted the reserve both in tonnage and value, leaving but 10,799 tons of 14 ounces silver and .17 ounce gold per ton. The field for development or the Santa Fe No. 1 vein is now extremely limited. 14,169 tons were mined, the bulk, or 14,140 tons, from stopes.

Santa Fe No. 2 Vein

The small production of 1,305 tons was otbained entirely from stoping, still leaving a reserve of 44,166 tons of excellent grade.

Jucuara Group

Jucuara No. 2 Vein

The Jucuara No. 2, with 43,160 tons from stopes and 295 tons from development, was again the heaviest single producer. Inability to develop this vein below the Lower 650 level, due to

the lack of pumping equipment, prevented any possibility of adding to the reserve to offset depletion. Consequently, its reserves show the greatest shrinkage in tonnage, with a slight decrease in grade compared with the previous year. Stoping at the same rate is contemplated. This year will leave little of the present blocked out reserve of 58,622 tons of good gold content.

Jucuara No. 4 Vein

Production from this vein amounted to 4,095 tons, of which 87% came from stopes. 10,638 tons of good grade silver ore remain in the active reserve.

Old Mine Group

Colonia Vein No. 1

Development on the upper reaches of this vein, although permitting the addition of a new block to the active reserve, was not sufficient to offset ore extracted amounting to 5,429 tons, of which 20% was obtained from development sources. The limits of the Colonia vein No. 1 being well defined, any large additional tonnage cannot result from further development. An appreciable tonnage, of 104,718, remains in the active reserve with grade unchanged from that of last year.

Southwest No. 2 Vein

6,398 tons were stoped during the year, leaving 2,283 tons of fair grade in the unbroken reserve.

Southwest No. 3 Vein

Production from this vein totalled 7,326 tons, of which amount 91% came from stopes. 5,447 tons of good grade silver ore remain.

Southwest No. 5 Vein

Active development of a newly discovered extension on the Lower 250, Lower 200, and Zero Levels, with raises therefrom, allowed a substantial increase of reserve ore, which now shows 19,148 tons at 13 ounces silver and .08 ounce gold per ton, against the small tonnage of 2.253 for 1942. The Southwest No. 5 vein produced 6,000 tons during 1943, of which 2,652, or 44%, came from development.

Opportunities for further development on this vein are limited.

Southwest No. 6 Vein

The production from this vein, amounting to 1,833 tons, of which amount 1,777 tons came from stopes, now leaves a small tonnage of 530 in the ore reserves. Production from the Southwest No. 6 will probably end in 1944.

Southwest No. 10 Vein

Development on and between the Lower 400 and Lower 200 levels resulted favorably. A small increase to the blocked out reserve resulted. Of 2,884 tons extracted, 55½%, or 1,602 tons, came from development. 13,973 tons of low grade remain.

Crisanta Vein

Mention is made elsewhere in this report of again making accessible this old vein by crosscutting from the Upper 550 Colonia vein. Drifting on the vein at this elevation with raises therefrom exposed a narrow vein with good values distributed over short distances. These portions, now easily accessible, may be profitably extracted by selective mining, but they have not yet been added to the active list. The Crisanta vein yielded 1,296 tons, entirely from development.

South San Miguel Vein

This old vein, not worked for some years, was again made accessible by a crosscut driven in 1942 from the Upper 450 level from the Catalina No. 2 vein. In last year's report, ore blocked out on the upper levels of the South San Miguel vein was included in the inactive ore reserve list; but being now of easy access, reserves of 21,134 tons of low grade have been transferred to the active list. 344 tons were stoped.

Catalina No. 2 Vein

Sinking on this vein from the Upper 450 level, and drifting to the north on the Upper 350 level, opened up ore of fair grade silver, and this permitted a small addition to the reserve. Opportunity for further development exists, but it is not expected that the Catalina No. 2 will be a heavy producer. 370 tons, all from development, were extracted.

Miscellaneous Group

Santa Gertrudis No. 1 Vein

This yielded 6,861 tons, of which 6,820 tons came from stoping operations. A reserve of 24,505 tons of 16 ounces silver and .10 ounce gold per ton is shown.

Other Veins

3,366 tons were produced from old fills and the following veins: Candelaria, Culebra No. 1, Culebra Stringer, Fortuna, Rosario, Santa Fe Main, Southwest Nos. 1, 4 and 7, and Termopilas.

Ore Production

Ore production is summarized as follows:

	1943	1942	1941	1940
From Stoping (tons)	155,712	162,598	152,874	151,153
From Development (tons)	21,497	28,749	33,687	33,575
	177,209	191,347	186,561	184,728

Ore from development dropped from 16% in 1942 to 12% in 1943.

General Mine Comments

Both the lateral and vertical limits of all known veins were fairly well established by the end of 1943. Although there still remains a limited field for further vein development, it is expected that ore from development sources during 1944 will not exceed 10% with a correspondingly greater drain on existing reserves if full production can be maintained.

Because of limited supervisory personnel it is planned to mine principally from the Jucuara Nos. 1 and 2 veins, the Salvador, Southwest and Santa Gertrudis veins, and the Culebra. If this can be accomplished without adversely affecting the production, the better grade gold veins in the Santa Fe and San Benito districts should remain nearly intact.

The Mill

Several forced temporary shut-downs for lack of essential supplies resulted in the lowest tonnage milled since 1938. Granted an adequate supply of vital supplies, tonnage production should be normal this year, as no major repairs are called for.

Some improvement in recovery over the previous year was effected.

General Comments on Rosario Property

Apart from the difficulty of receiving adequate supplies on time, the outstanding factor in operations was the greatly increased cost of supplies. The mill suffered most heavily. The average cost of mill supplies rose 37%. The required routing of nearly all supplies to Honduras Atlantic ports gave rise to excessive land freight charges.

The mine suffered relatively less as it was possible to secure the principal supplies largely by normal routing. Elimination of exploration and curtailment of development contributed to the reduced per ton mining cost.

General Outlook for 1944

The present supply situation, if reasonably maintained during the year, justifies the hope of uninterrupted operation during 1944. The demand for man-power, due to war conditions, has depleted our staff. Nevertheless, it is a great pleasure to report that the members of the staff have accepted their added burdens with loyal determination, for which they are to be heartily commended.

Respectfully submitted,

K. H. Matheson,
General Manager.

Active Ore Reserves December 31, 1943

Estimated Reserves (13 & 14 cu. ft. per ton)	Average Width Feet Vein	Waste	Stope	Tons Ore & Waste	Av. Troy Ozs. Per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Independencia Group								
San Blas No 2.....	1.01	1.72	2.73	18,070	10	.07	181,095	1,349
Salvador Group								
Salvador	1.84	1.60	3.44	25,648	13	.03	335,451	869
Jucuara No. 1 (Fortuna)	2.21	1.58	3.79	123,318	20	.04	2,429,166	4,983
Fortuna—North	1.87	1.49	3.36	2,630	21	.04	54,769	105
Fortuna—Vein	2.10	1.40	3.50	4,192	12	.03	49,891	119
Carmen No. 1	2.70	1.80	4.50	2,943	10	.02	28,111	61
Jucuara Group								
Jucuara No. 2.....	2.78	2.30	5.08	58,622	19	.23	1,093,050	13,749
Jucuara No. 3.....	1.64	1.98	3.62	13,117	10	.22	126,960	2,888
Jucuara No. 4.....	2.05	1.79	3.84	10,638	25	.09	266,060	941
Jucuara No. 5.....	2.60	1.90	4.50	2,160	14	.10	31,200	212
Santa Fe Group								
Santa Fe No. 1.....	1.90	1.71	3.61	10,799	14	.17	152,829	1,830
Santa Fe No. 2.....	2.43	2.89	5.32	44,166	46	.44	2,032,119	19,401
Santa Fe No. 3.....	2.35	1.65	4.00	6,230	32	.36	201,688	2,246
San Benito No. 1.....	1.31	1.69	3.00	13,107	17	.12	219,500	1,620
San Benito No. 2.....	1.76	1.28	3.04	32,065	22	.25	692,502	8,092
Old Mine Group								
Catalina No. 2.....	1.82	1.18	3.00	4,528	19	.02	87,161	113
Capitana	0.63	2.37	3.00	4,639	5	.18	20,960	823
Colonia No. 1.....	1.43	2.03	3.46	104,718	13	.18	1,410,220	18,595
Colonia No. 2.....	1.38	1.62	3.00	1,602	11	.10	17,541	163
Culebra No. 1.....	1.54	1.46	3.00	23,375	14	.03	330,515	658
Culebra No. 2.....	1.83	1.25	3.08	18,591	17	.06	319,049	1,048
Culebra—Stringer	1.38	1.62	3.00	5,008	11	.03	54,704	169
Guadalupe	1.88	1.12	3.00	2,167	12	.09	26,846	205
Nueva (Part)	0.84	2.16	3.00	6,919	9	.11	61,012	760
North West	1.26	1.74	3.00	1,212	15	.14	17,815	168
Rosario No. 2.....	2.19	0.81	3.00	2,245	9	.12	21,307	279
Rosario—Stringer	1.23	1.77	3.00	3,318	11	.09	35,259	299
South West No. 2.....	2.72	1.28	4.00	2,283	10	.12	23,460	279
South West No. 3.....	1.48	3.02	4.50	5,447	22	.04	121,264	223
South West No. 4.....	1.59	2.91	4.50	7,565	28	.11	212,036	827
South West No. 5.....	1.93	2.07	4.00	19,148	13	.08	254,255	1,509
South West No. 6.....	1.27	1.23	2.50	530	17	.03	8,895	15
South West No. 7.....	1.39	1.61	3.00	10,678	16	.12	168,668	1,279
South West No. 10....	1.42	2.08	3.50	12,576	10	.06	124,731	696
San Joaquin	1.00	2.00	3.00	3,538	19	.28	68,717	987
San Miguel South.....	1.74	1.26	3.00	19,021	14	.06	267,521	1,108
Termopilas	1.67	1.62	3.29	6,464	14	.13	90,991	832
Other Veins								
Veta No. 4 South.....	1.36	1.64	3.00	27,990	19	.03	534,794	800
Veta No. 4 North.....	1.73	1.27	3.00	2,712	14	.04	39,100	109
Santa Gertrudis No. 1.	1.66	1.42	3.08	24,505	16	.10	383,638	2,542
Santa Gertrudis No. 2.	1.56	1.44	3.00	946	8	.06	7,380	54
				689,430	18.28	.1349	12,602,230	93,005
Broken Ore In Stopes								
(21.0 cu. ft. per ton)								
Veins								
Independencia				202				
Jucuara No. 1.....				35,740				
Salvador				10,848				
San Benito No. 1.....				81				
San Benito No. 2.....				56				
Santa Gertrudis No. 1.....				601				
Santa Fe No. 1.....				6,242				
Santa Fe No. 2.....				1,808				
South West No. 7.....				53				
Mine Storage Chutes.....				2,642				
Mill Ore Bin.....				476				
				58,749	24.00	.0800	1,409,976	4,700
Total Active Reserves as of Jan. 1, 1944.....				748,179	18.73	.1306	14,012,206	97,705

Note on Reserves:

While it is inherently probable that the tonnages and grades when actually mined from these individual veins will vary somewhat, up or down, from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

GENERAL STATISTICS

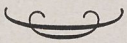
	Year 1943		Year 1942	
Number of Men employed per working day	1,104		1,188	
Tons of ore mined	177,209		191,347	
Tonnage mined from October 1, 1907 to December 31st, 1943:				
From stoping	3,308,964		3,153,902	
From development	675,855		654,358	
From fills	238,248		237,598	
	4,223,067		4,045,858	
Power Statistics				
Rainfall	41.93 Inches		59.47 Inches	
Power Sources	*Kilowatt Hrs.*	%	*Kilowatt Hrs.*	%
San Juancito Plant	5,129,230	52.26	4,304,960	42.93
Guadalupe Plant	2,871,510	29.26	3,677,700	36.67
Aguacatal Plant	1,248,900	12.73	1,260,400	12.57
Diesel Plant	564,100	5.75	784,900	7.83
	9,813,740	100.00	10,027,960	100.00
		Per KWH		*Per KWH*
Hydro power—cost of	$17,329.	.0018735	$18,312.	.0019812
Diesel power—cost of	13,749.	.0243747	13,466.	.0171570
Total	$31,078.	.0031669	$31,778.	.0031690
Assay Office and Laboratory				
Assays run—number	47,699		51,059	
Total cost	$12,205.		$ 9,893	
Cost per assay	$ .26		$ .19	
Educational (Schools)	$14,546.		$14,298	
Medical Department				
Maintenance	$ 8,297.		$ 7,268	
Cases handled	10,404		9,974	
Miscellaneous				
Police and Watchmen	$16,100.		$16,121.	
Mine Hotel	$ 8,776.		$11,055.	
Care of Roads	$10,417.		$ 4,222.	
Agencies	$ 3,753		$ 4,144	

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NEW YORK AND HONDURAS ROSARIO MINING COMPANY



SIXTY-FOURTH ANNUAL REPORT
NINETEEN HUNDRED AND FORTY-FOUR

NEW YORK AND HONDURAS ROSARIO MINING COMPANY

OFFICERS

April 5, 1944 to April 4, 1945

WM. A. PRENDERGAST, *President*

LEWIS L. CLARKE, *Chairman of Board* — W. C. LANGLEY, *Treasurer*

H. A. GUESS, *Vice-President* — J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

April 5, 1944 to April 4, 1945

LEWIS L. CLARKE, *Chairman*

JULIAN B. BEATY — W. C. LANGLEY

H. A. GUESS — LESTER S. OPPENHEIMER

DR. J. RALPH JACOBY — WM. A. PRENDERGAST

HERBERT A. KAUFMANN — M. F. SOTO

RICHARD H. VALENTINE

EXECUTIVE COMMITTEE

April 5, 1944 to April 4, 1945

LEWIS L. CLARKE, *Chairman* — H. A. GUESS

JULIAN B. BEATY — DR. J. RALPH JACOBY

M. F. SOTO

WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

PRESIDENT'S REPORT

March 10, 1945

To the Stockholders of the
New York and Honduras Rosario Mining Company:

The results of the Company's operations as they are revealed in this "Annual Report" are evidence of the good fortune that has followed your Company against the background of War conditions. At the present time there is reason to believe that an approximately favorable record may be made in 1945. Our relations with the Government and people of Honduras have continued to foster sentiments of genuine amity and kinship. We extend our cordial greetings to President Tiburcio Carias A., and the Honduran people, and wish for them the most beneficent fruits of enduring time.

General Manager's Report (Pages 14 to 24):

This report merits your earnest consideration, and we call your attention to the statements regarding "Mine Reserves" (Pages 14, 21, 22 and 24). These tables show a diminution in Reserves, and the per ton value thereof, necessitating the use of a somewhat lower valued ore during 1945, with a resultant adverse effect on earnings. As the General Manager states, it is designed to use every possible resource to counteract this condition.

Probable Earnings in 1945:

The estimate for the year 1945, based upon—

(1) The grade of ore to be used;
(2) No undue rise in production costs;
(3) Reasonable transportation facilities; and
(4) The present price of silver,

is $2.50 per share.

Neptune Gold Mining Company:

On December 7, 1944, this Company redeemed 50% of the then outstanding 5% Income Debenture Notes due 1948. This redemption reduces our holdings of those Notes to $142,566.89. Interest on all the Company's Debentures has been paid to December 31, 1944.

In accordance with custom, we will mail to you a copy of the Annual Report of the Neptune Gold Mining Company, when issued.

Newly Acquired Properties:

El Mochito, Honduras, and El Dorado, Salvador.

In the last Annual Report we stated that war conditions would delay the progress of these properties to a production basis. The greater demands upon our manufacturing industries for war materials since last December will, we fear, cause an even greater delay than we anticipated a year ago.

El Transito Mining Property (Honduras, C.A.)

This property is located in the Department of El Valle near the Bay of Fonseca. It has been known to us for a long time, but our interest never reached that stage where its acquirement was contemplated. In 1941, the property was offered to the American Smelting and Refining Company; but because of war conditions definite action was deferred. In the meantime the property was sequestered by the Government of Honduras under an Enemy Alien Act, as it was owned by Nationals with whose country the United States and Honduras were at war. Discussions were renewed with the American Smelting & Refining Company in September 1944 and as a result, on their invitation, we cooperated with them in acquiring the property at a sale held by the Government of Honduras of Enemy Alien Property. An Agreement was made with the American Smelting and Refining Company that they would hold a 65% interest and the New York and Honduras Rosario Mining Company 35%. The cost of the property was $45,000., and our proportion thereof $15,750.

The property contains a strong vein of rather low grade gold ore, but of good width (20 to 30 feet), amenable to treatment by cyaniding.

Former owners had done a certain amount of underground development and it is contemplated to do enough further development, coupled probably with diamond drilling, to get a clearer picture of tonnage possibilities.

The plans under consideration will naturally be affected by war conditions.

The Mines of Yuscaran.

Outside of the Rosario property, this is the largest group of mines in Honduras. There has been little work done upon them since 1900, but there has always been some confidence in their productivity, if subjected to earnest and skillful efforts to determine their value. The interests which have been in control of these properties for a number of years were unable to finance them, and the properties were sold by the Government at a "Tax Sale" on February 2nd, 1945, and were bought by us. The Government of Honduras has a one-quarter interest in these properties, and negotiations are now in progress to determine the basis on which this interest will be adjusted. A program of action upon these properties will be developed in due course; but as we have

indicated in respect to other properties, will have to depend for its fulfillment upon the amelioration of the necessary restrictions imposed by the present war rulings.

During the year 1944, we have made examinations of, or investigations regarding, other properties located in the United States, Mexico and the Central Americas.

Changes in Property Accounts:

The Federal Income Tax Law of 1916 permitted mining companies to make a revaluation of their "Mines, Real Estate and Concessions" as of March 1, 1913. This Company made such a revaluation, increasing the amount of $1,500,000 placed on the books when the Company started business in 1880, to $3,000,000, which higher valuation was entered on the books December 31, 1916. At the same time an offset of $1,500,000 was carried to an "Appreciation Surplus Account". Annual charges and credits made from 1919 reduced this "Appreciation Account" and the Appreciation Surplus Account" in each case, to the sum of $304,105.95 on January 1, 1943. As of that date the Board of Directors eliminated both of these accounts from the Company's books and Financial Statements as shown in "Statement of Surplus", Page 10, Annual Report of 1943.

The original valuation of $1,500,000, as of 1880, is shown in the Company's Balance Sheet of December 31, 1943, as follows:

Mines, Real Estate and Concessions at Valuation originally established in 1880	$1,500,000.00
Less allowance for depletion applicable thereto	1,232,705.48
	$ 267,294.52

For the first thirty-three years of this Company's life (1880-1912) no action had been taken to eliminate the original valuation by charges to earnings for depletion or amortization. From March 1, 1913, to December 31, 1918, depletion charges were made against the original valuation of $477,552.00; and from 1919, to and including 1944, the charges were $815,036.52, a total of $1,292,588.52, leaving a balance of $207,411.48, which would in regular course be amortized out of current income during the next two or three years.

As indicated earlier in this report, the ores now being extracted are from lower grade bodies, with a consequent reduction in earnings, which means that further amortization charges against current earnings would unduly decrease the net amount available for stockholders.

Consideration of these questions with the Company's independent auditors resulted in their advising us that the remaining balance of this account at December 31, 1944, could properly be written off against accumulated "Earned Surplus" as of the date mentioned, and that such action would be in accordance with recognized accounting practices in the Mining industry.

The Board of Directors therefore decided that in their judgment it would be in the best interest of the corporation, and its stockholders, that such procedure be followed, and an appropriate Resolution to that effect, was adopted.

General Financial and Statistical Matters:

	1944	1943
Earnings (Per Share)	$ 2.88	$ 2.92*
Dividends Paid (Per Share)	2.75	2.65
Income From Investments	107,584.46	97,909.48
Marketable Securities Owned as at December 31st		
Cost	2,000,392.20	1,795,165.38
Market	2,030,213.71	1,765,231.37
Difference between Cost and Market	Plus 1-49/100%	Minus 1-69/100%

* Actual earnings from operations as stated in my Annual Report for 1943.

The Bullion Production from the organization of the Company to December 31, 1944 amounted to $71,401,953.00, and the dividends paid therefrom were $17,652,027.00.

There is submitted with this Report and made a part hereof:

1. A Comparative Statement of Operations for the years 1944 and 1943 (Page 6), and other general statistics (Page 24).
2. A Comparative Income and Profit and Loss Statement for the years ended December 31, 1944 and December 31, 1943.
3. A Balance Sheet for the year ended December 31, 1944.
4. A statement of the Surplus Account for the year ended December 31, 1944.
5. A List of the Securities held by this Company December 31, 1944.

Respectfully submitted,

WM. A. PRENDERGAST,
President.

Comparative Statement of Operations

Years ended December 31, 1944 and 1943

	Year 1944	Year 1943	Increase Decrease*
Tons of ore milled	187,700	177,200	10,500
Average tons milled per day, full running time	533	532	1
Ounces of silver recovered	3,115,351.75	3,161,901.09	46,549.34*
Number of ounces of silver recovered per ton of ore	16.59750	17.84368	1.24618*
Silver recovered—percentage	91.07993	91.88250	.80257*
Sales value of silver recovered	$1,401,908.34	$1,422,855.56	$20,947.22*
Average sales value of silver per ounce	$ .45000	$ .45000	.....
Average cost of silver per ounce**	$ .22942	$ .22701	.00241
Average profit on silver per ounce**	$ .22058	$ .22299	.00241*
Average sales value of silver recovered per ton of ore	$ 7.46888	$ 8.02966	$ .56078*
Average cost of silver per ton of ore**	$ 3.80774	$ 4.05080	$ .24306*
Average profit on silver recovered per ton of ore**	$ 3.66114	$ 3.97886	$ .31772*
Ounces of gold recovered	19,773.790	18,093.727	1,680.063
Number of ounces of gold recovered per ton of ore	.10535	.10211	.00324
Gold recovered—percentage	94.1654	93.2423	.9231
Sales value of gold recovered	$ 692,082.65	$ 633,280.43	58,802.22
Average sales value of gold per ounce	$ 35.00	$ 35.00	.....
Value of gold recovered per ton of ore	$ 3.68717	$ 3.57382	$ .11335
Number of bars of bullion shipped from mine	1,801.	1,789.	12.
Ratio of gold to silver	1 :158	1 :175	:017*
Total tons treated by mill from 1912 to date	4,244,608	4,056,908	187,700

** After credit for sales value of gold recovered

Income and Profit and Loss Statement

Years ended December 31, 1944 and 1943

	Year 1944	Year 1943	Increase Decrease*
Production of gold and silver	$2,093,990.99	$2,056,135.99	$37,855.00
Less freight and other expenses on bullion	116,863.04	128,732.57	11,869.53*
OPERATING INCOME	$1,977,127.95	$1,927,403.42	$49,724.53
Operating expenses	1,194,464.54	1,129,657.46	64,807.08
MINE OPERATING PROFIT	$ 782,663.41	$ 797,745.96	$15,082.55*
New York administrative and general expenses	95,467.59	92,693.05	2,774.54
NET OPERATING PROFIT	$ 687,195.82	$ 705,052.91	$17,857.09*
Add income from investment, etc.	107,584.46	97,909.48	9,674.98
	$ 794,780.28	$ 802,962.39	$ 8,182.11*
Less other deductions from income (Note A)	17,975.45	17,786.62	188.83
PROFIT BEFORE TAXES ON INCOME AND PROVISION FOR DEPLETION	$ 776,804.83	$ 785,175.77	$ 8,370.94*
Taxes on income—estimated (Note B):			
Provision for the year:			
Federal normal income tax and surtax	$ 154,719.68	$ 176,434.10	$21,714.42*
Government of Honduras, C. A.	27,280.32	28,565.90	1,285.58*
TOTAL TAXES	$ 182,000.00	$ 205,000.00	$23,000.00*
	$ 594,804.83	$ 580,175.77	$14,629.06
Appropriated for depletion (Note C)	59,883.04	36,811.42	23,071.62
	$ 534,921.79	$ 543,364.35	$ 8,442.56*
Add credit arising from capitalization of expenditures made during prior year on new mining property purchased in 1943		29,655.72	29,655.72*
NET PROFIT FOR YEAR	$ 534,921.79	$ 573,020.07	$38,098.28*
NOTE A—Other deductions from income include:			
Investigations of outside properties	$ 165.00	$ 1,488.34	$ 1,323.34*
Federal capital stock tax, New York State franchise tax and New York City gross receipts tax	10,877.23	8,678.71	2,198.52
Obsolete inventory written off	2,903.74	2,752.37	151.37
Business association dues, subscriptions and donations	3,630.06	2,084.34	1,545.72
Interest paid		2,143.56	2,143.56*
Sundry	399.42	639.30	239.88*
	$ 17,975.45	$ 17,786.62	$ 188.83

NOTE B—No provision is required for federal excess profits tax.

NOTE C—Beginning with the year 1932, depletion has been taken on tax returns on a percentage basis in accordance with respective revenue acts. Entries recording depletion as they affect the older portion of the property are carried in the general accounts. Depletion deductions on ore mined from the newer discoveries, which newer discoveries are not carried on the books, are made for income tax purposes only.

BALANCE
DECEMBER

ASSETS

CURRENT ASSETS			
Cash		$ 369,016.57	
Bullion at smelters and in transit—less allowance for expenses		375,939.39	
Marketable securities—at cost (aggregate quoted market prices —$29,821.51 in excess of such cost)			
United States Government obligations	$1,200,000.00		
Municipal bonds	174,762.58		
Public Authority bonds	52,572.55		
Domestic Corporation bonds	203,240.41		
Domestic Corporation Stocks	369,816.66		
	$2,000,392.20		
Interest accrued on bonds	7,202.94	2,007,595.14	
Accounts receivable		16,599.08	
Broken ore in stopes and mill bins—at cost		169,624.97	
Inventories—materials and supplies—at cost		438,947.53	
TOTAL CURRENT ASSETS			$3,377,722.68
INVESTMENTS AND OTHER ASSETS			
Neptune Gold Mining Company, ten year 5% income debenture notes, due March 1, 1948, principal amount $142,566.89, and 5100 shares of its capital stock of no par value—at cost		$ 142,566.89	
Sundry accounts receivable		3,818.57	
Sundry securities		2,174.49	148,559.95
PREPAID ITEMS, ETC.			
Balance at December 31, 1943 of advance to Government of Honduras, C.A. under decree #67	$ 167,638.99		
Less amount applicable to the year 1944—estimated	27,280.32	$ 140,358.67	
Inventories of supplies, prepaid insurance, taxes and other expenses		86,576.86	226,935.53
BUILDINGS, MACHINERY AND EQUIPMENT			
At cost		$2,348,695.25	
Less allowance for depreciation		1,970,310.74	378,384.51
MINES, REAL ESTATE AND CONCESSIONS			
At valuation originally established in 1880		$1,500,000.00	
Less allowance for depletion		1,292,588.52	
		$ 207,411.48	
Less amount charged to earned surplus at December 31, 1944		207,411.48	
		—0—	
New mining properties (El Dorado, El Mochito and El Transito) and development expenses thereon—at cost		265,090.85	265,090.85
			$4,396,693.52

SHEET
31, 1944

LIABILITIES

CURRENT LIABILITIES		
Drafts payable	$ 65,476.58	
Accounts payable	68,587.07	
Accrued taxes	8,578.54	
Federal taxes on income—estimated	185,960.31	
TOTAL CURRENT LIABILITIES		$ 328,602.50
RESERVE FOR CONTINGENCIES		25,000.00
CAPITAL STOCK AND SURPLUS		
Capital stock (par value $10.00 per share):		
Authorized and issued—188,367 shares	$1,883,670.00	
Less in treasury — 2,735 shares	27,350.00	
Outstanding 185,632 shares	$1,856,320.00	
Earned surplus	2,186,771.02	4,043,091.02
		$4,396,693.52

Statement of Surplus

Year ended December 31, 1944

EARNED SURPLUS

Balance January 1, 1944		$2,339,814.70

ADDITIONS

Net profit for the year	$534,921.79	
Restoring to earned surplus balance of reserve previously provided to adjust marketable securities to market, not required because aggregate quoted market prices of securities at December 31, 1944 exceeds the cost thereof	29,934.01	564,855.80
		$2,904,670.50

DEDUCTIONS

Dividends paid, totalling $2.75 per share:		
March 25, 1944—$ .65 per share	$120,660.80	
June 30, 1944— .65 per share	120,660.80	
September 30, 1944— .70 per share	129,942.40	
December 30, 1944— .75 per share	139,224.00	$510,488.00
Writing off to earned surplus remaining balance at December 31, 1944 of original amount established in 1880 for Mines, Real Estate and Concessions, as authorized by Board of Directors	207,411.48	717,899.48
Balance at December 31, 1944		$2,186,771.02

Marketable Securities

December 31, 1944

	Par Value	Quoted Market Prices December 31, 1944	
UNITED STATES GOVERNMENT SECURITIES			
Treasury bonds:			
2% due December 15, 1954-1952	$535,000.00	$536,671.88	
2½% due March 15, 1958-1956	80,000.00	82,950.00	
2¼% due September 15, 1959-1956	200,000.00	201,437.50	
Certificates of Indebtedness:			
⅞% Series "H", due December 1, 1945	235,000.00	235,117.59	
Savings bonds:			
2½% Defense Series "G", due May 1, 1953	50,000.00	50,000.00	Note
2½% Defense Series "G", due January 1, 1955	100,000.00	100,000.00	Note
NEW YORK CITY BONDS			
3% Corporate Stock for Transit Unification, Series R-31, due June 1, 1980	175,000.00	197,312.50	
TRIBOROUGH BRIDGE AUTHORITY			
3¼% Sinking Fund Revenue Bonds, due February 1, 1980	50,000.00	52,187.50	$1,455,676.97
DOMESTIC RAILROAD BONDS			
St. Louis-San Francisco Railway Co., Prior Lien Mtge. 5% Gold Bonds, Series "B", due July 1, 1950	50,000.00	26,625.00	
New Orleans, Texas and Mexico Railway Co., 1st Mtge. 5½% Gold Bonds, Series "A", due April 1, 1954	25,000.00	20,625.00	
Great Northern Railway Company, General Mtge. 3⅜%, Series "L", due January 1, 1970	50,000.00	52,625.00	
New York, Chicago and St. Louis R.R. Co., Ref. Mtge. 4½%, Series "C", due September 1, 1978	50,000.00	51,562.50	
Chicago and North Western Railway Co., 1st and General Mtge. 4%, Series "A", due January 1, 1989	3,273.04	3,436.69	
Chicago and North Western Railway Co., 2nd Mtge. Convertible Income bonds 4½%, Series "A", due January 1, 1999	4,952.63	4,067.35	158,941.54
DOMESTIC PUBLIC UTILITY BONDS			
Joplin Water Works Co., 1st Mtge. 5% Gold Bonds, Series "A", due March 1, 1957	25,000.00	26,625.00	26,625.00
(FORWARD)			$1,641,243.51

	Number of Shares	Quoted Market Prices December 31, 1944	
(FORWARD)			$1,641,243.51
STOCKS			
American Chicle Co., common stock, no par	500	$ 62,750.00	
American & Foreign Power Company Inc., $7.00 cumulative preferred stock, no par	500	48,000.00	
Chicago and North Western Railway Co., 5% Series "A", preferred stock	65.0301	3,657.94	
Chicago and North Western Railway Co. Common stock, no par, stated at $100.00 per share	102.7132	2,593.51	
The Commonwealth and Southern Corp. $6.00 cumulative preferred stock, no par	550	52,731.25	
The Home Insurance Insurance Co., capital stock, par value $5.00 per share	1,500	39,375.00	
Iowa Southern Utilities Company of Delaware:			
Common stock, par value $15.00 per share	2,100	18,112.50	
Dividend arrears certificate on 500 shares of 7% cumulative preferred stock	500	4,250.00	
Jersey Centrol Power and Light Co. 5½% cumulative preferred stock, par value $100.00 per share	500	51,750.00	
Public Service Co. of Indiana, Inc., common stock, no par	500	10,000.00	
Standard Oil Co. of California, capital stock, no par	500	19,062.50	
Standard Oil of New Jersey, capital stock, par value $25.00 per share	1,000	56,250.00	
Socony-Vacuum Oil Co., capital stock, par value $15.00 per share	1,500	20,437.50	388,970.20
Total market value at December 31, 1944			$2,030,213.71

OTHER INVESTMENTS (at cost)

Neptune Gold Mining Company, ten year 5% income debenture notes due March 1, 1948, principal amount $142,566.89 and 5100 shares of its capital stock of no par value	$ 142,566.89

NOTE: Taken at face value.

Report of Auditors

To the Stockholders of
New York and Honduras Rosario Mining Company:

We have examined the balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY as of December 31, 1944, and the statements of profit and loss and surplus for the year then ended, have reviewed the system of internal control and the accounting procedures of the Company, including minutes of stockholders' and directors' meetings, and have examined or tested accounting records of the Company and other supporting evidence, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary. Because of war time difficulties it was not practicable to make the customary annual examination of the records at the mine office in Honduras, in respect of which we have applied other auditing procedures.

Cash, securities and bullion were verified by actual count, inspection of documents and by direct communication with custodian or depositaries.

In our opinion, the accompanying balance sheet and related statements of profit and loss and surplus present fairly the position of NEW YORK AND HONDURAS ROSARIO MINING COMPANY at December 31, 1944 and the results of its operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST.

New York, N. Y.
March 3, 1945.

January 1, 1945.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company

Gentlemen:

This report embodies the most essential details of 1944 operations.

THE MINE

Ore Reserves

The following comparative summary of the Rosario Mine Reserves, based on silver at 45 cents and gold at $35.00 per Troy ounce, appears in detail in Annexes "A" and "B".

Active Ore Reserves

	Tons Ore Plus Waste	Av. Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
January 1, 1944	748,179	18.73	.1306	14,012,206	97,705
January 1, 1945	711,427	18.27	.1198	13,000,643	85,246
Decrease	36,752	.46	.0108	1,011,563	12,459

Inactive Ore Reserves

January 1, 1944	14,443	11.00	.06	154,847	797
January 1, 1945	14,443	11.00	.06	154,847	797
No change	.....	.....	.....	.....	.....

Development and Operating Connections

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet
1943	10,886	7,705	9,220	27,811
1944	10,380	9,833	7,140	27,353
Decrease	506		2,080	458
Increase		2,128		

Crosscuts and Raises
Below the Peña Blanca Level

Zero Southwest No. 5

Commenced in Block 70, this crosscut was advanced 207 feet in a southeasterly direction to cut any upward extension of the Southwest Vein No. 11. Nothing having been exposed over the distance driven the crosscut was discontinued.

Lower 200 Southwest No. 10

Driven 122 feet in a direction southwest from Block 73, this crosscut intersected a vein, in Block 75, which was suspected to exist as an offshoot from Southwest #10 on the Lower 300 level. Drifting north and south on the vein developed ore of average grade and permitted a small addition to the blocked out reserve. This new vein is referred to as Southwest No. 12.

Lower 200 Jucuara No. 1

175 feet of crosscut from Block 73 was driven northeast to cut any possible extension downward of a known vein split on the Upper 150 level. A small stringer was cut at 65 feet, but drifting east and west over a short distance proved ore of low grade and work was, therefore, stopped on drifts and crosscut.

Lower 300 Southwest No. 10

This crosscut, started in Block 74, was driven 180 feet on a course southwest to cut the Southwest #12 vein at a point below the best ore exposed on the Lower 200 level. Drifting on the vein over a short distance has not yet exposed ore comparable in value to that encountered on the level above.

Lower 300 Southwest No. 5

Commenced in Block 69, this crosscut was advanced 96 feet in a direction south to open up the Southwest No. 11 vein at this elevation. Drifting northeast and southwest over a distance of 290 feet exposed spotty silver and gold values which will warrant stoping on a moderate scale.

Lower 300 Rosario

To expose any downward continuity of a known surface outcrop, a crosscut driven 1,352 feet, commencing in Block 11, failed to intersect any vein of interest and will soon be stopped.

Lower 300 Jucuara No. 9

To explore further the Jucuara #9 vein, found and developed first on the Lower 400 level, a crosscut commenced in Block 87 was driven 159 feet on a westerly course, breaking into a raise driven on the vein from the Lower 400 level. Although a welcome find, this vein is not considered to be of major importance. It will be actively developed during 1945.

Lower 300 Buena Ventura

To explore the area between the Buena Ventura and Guadalupe veins and to intersect any possible downward extension of the Candelaria No. 2 vein developed on the Upper 350 level, a crosscut northeast was driven 183 feet, starting in Block 51. Nothing of interest has yet been cut, but it is proposed to continue the crosscut to its objective.

Lower 300 Culebra No. 2

146 feet of crosscut, commenced in Block 48, and driven in an easterly direction, cut, at 40 feet, an extension southward of the Culebra No. 2. Ore of fair grade was developed over a distance of some 100 feet and it is now being stoped.

Lower 400 Jucuara No. 2

Mentioned in last year's report, this crosscut originally started in Block 87, was advanced 695 feet in a direction southwest and south. At 275 feet from the starting point the Jucuara No. 7 vein was cut in Block 89. Drifting on this vein over a distance of 70 feet to the west exposed a narrow vein, with disappointing values. At approximately 500 feet from the starting point another vein, known as Jucuara #9, was cut. Drifts to the east and west with raises therefrom, developed ore of moderate grade, sufficiently good to be included in new reserves.

Lower 650 Jucuara No. 2

Commenced in Block 88 as a crosscut, it was driven 266 feet southwest cutting the Jucuara No. 9 vein, already opened on the Lower 400 level. Drifting on the vein and raising therefrom to the Lower 500 elevation proved ore of average grade with above average gold values. Development of the vein will be continued on the three levels now opened.

Crosscuts and Raises
Above the Peña Blanca Level

Upper 650 Jucuara No. 1

A crosscut, commenced from the northwest end of the Jucuara No. 1 Branch in Block 76, was driven 544 feet slightly west of north to cut any downward extension of a known surface outcropping. Nothing of interest having been encountered over this distance, the crosscut was turned to the northeast for a distance of 250 feet to expose any possible upward extension of the Southwest and Santa Gertrudis veins. Although results to date have proved negligible, continuation of the crosscut is considered advisable. Other crosscuts branching from the main one will be driven during 1945.

Upper 550 Culebra Stringer

A crosscut, commenced in Block 47, was driven due north for a distance of 214 feet to cut any upward extension of either the Buena Ventura or Rosario Stringer veins.

The Buena Ventura was cut late in the year, carrying average values where intersected. The crosscut is being continued and development on the Buena Ventura will be commenced early in 1945.

Upper 550 Termopilas

Started in Block 37, this crosscut was advanced 339 feet in a westerly direction. In Block 47 a small vein was cut, but 75 feet of drifting south on it proved ore of low grade. In Block 46 a crosscut driven north for a distance of 60 feet cut the upward extension of the Culebra Stringer vein. Drifting and raising opened up ore of moderate grade, allowing an appreciable addition to its reserve tonnage.

Upper 450 Colonia

To cut the Crisanta No. 1 vein at this elevation a crosscut was started in Block 46 and driven 307 feet. The vein was intersected in Block 48 and development work on it shows ore of low grade which, however, now permits the Crisanta to be included in the Active List.

Upper 150 Catalina No. 2

The downward extension of the Catalina No. 2 vein, already developed on the Upper 450 and 350 levels, was intersected on the Upper 150 level by means of a crosscut started in Block 63 and driven southwest for a distance of 226 feet. Development at this horizon exposed ore of fair grade which allowed an increase to the blocked out reserves.

359 feet of crosscutting, started in Block 62, from the Catalina No. 1 vein and driven in an easterly direction, failed to find anything of interest before reaching the South San Miguel vein in Block 59.

Upper 150 San Benito No. 1

Near shaft No. 3 a crosscut was commenced in Block 88 and driven 417 feet in a northeasterly direction in search of any possible west extension of the San Benito No. 1 vein and to cut the extension upward of the Santa Fe No. 1 vein. The San Benito vein was cut, but proved disappointing. The crosscut is being continued to the Santa Fe No. 1.

Upper 150 Southwest No. 1

In Block 70 a crosscut was driven 298 feet in a northerly direction to determine if the Southwest Nos. 4 and 7 veins carry through to the Upper 150.

Southwest No. 4 was intersected, but proved to be low grade. The crosscut lacks about 100 feet to cut the projection of the Southwest No. 7 vein.

Upper 150 Jucuara No. 1

To investigate the upward occurrence of a split section of Jucuara No. 1 disclosed on the Zero level, a crosscut started in Block 74 was driven 150 feet southwest. Failure to locate anything of interest caused the crosscut to be discontinued.

Miscellaneous Crosscuts

Apart from the crosscuts already described, additional short operating crosscuts were also driven as follows:

81 feet advance on the Lower 400 level from the Jucuara No. 2 in the crosscut originally started in Block 88. Also from the Jucuara No. 2, but on the Lower 650 level, a crosscut 109 feet in length from Block 88.

111 feet on the Lower 400 level to develop further Jucuara No. 4 and 208 feet of miscellaneous crosscutting from the Southwest and Santa Gertrudis veins.

Vein Development and Stoping

Veins Worked in 1944

Of the total of 187,653 tons sent to the mill during 1944, the greater part or approximately 96% came from the following veins: Carmen, Catalina No. 2, Colonia, Crisanta, Culebra Nos. 1 and 2, Culebra Stringer, Jucuara Nos. 1, 2, 4, 8 and 9, Salvador, Santa Fe No. 1, Santa Gertrudis No. 1, San Miguel South, Southwest Nos. 2, 3, 4, 5 and 10. The remaining tonnage was made up from other veins as follows: Buena Ventura, Capitana, Independencia, Jucuara Nos. 6 and 7, Northwest, Rosario, San Benito Nos. 1 and 2, San Miguel North, Santa Fe No. 2, Southwest Nos. 1, 6, 7, 8, 11 and 12, and Termopilas. Veins worked during the year numbered 39.

Salvador Group

Salvador Vein

This was again the third largest producer of the year, with 25,773 tons extracted, of which 2,011 tons came from development sources. 26,876 tons of 17 ounces silver and .03 ounce gold per ton is shown in the Active Reserve.

Additional reserves may well be expected from branches and extensions still undergoing investigation.

Jucuara No. 1—Fortuna Vein

With 37,929 tons mined, this vein was the second largest producer. Of the total mined 95½ percent came from stoping operations. 110,446 tons remain in the Active List.

Carmen Vein

Although small tonnages may appear from the Carmen vein in the future, the extraction of 2,181 tons, mostly from stopes, during the year 1944, depletes this old orebody to the extent that any further appreciable tonnage cannot be expected.

Santa Fe Group

Santa Fe No. 1 Vein

A tonnage of 1,908 extracted now leaves 6,787 tons of good gold ore in reserve.

The Santa Fe Nos. 2 and 3, and San Benito Nos. 1 and 2, were practically untouched during 1944. More than half of the total gold reserve is contained in the Santa Fe Group veins.

Jucuara Group

Jucuara No. 2 Vein

With 39,487 tons mined, of which only 256 were derived from development sources, this vein was again the greatest single producer of the year. Tonnage remaining appears as 34,683, with a reduction in grade, being but 17 ounces silver and .19 ounce gold per ton as against 19 ounces silver and .23 ounce gold per ton for the year previous. Stoping at the same rate is contemplated during the coming year.

Jucuara No. 4 Vein

Exploration of this vein on the Lower 400 level achieved good results and permitted a substantial increase to its reserve which now shows 19,897 tons of 23 ounces silver. Of the 5,851 tons mined, 4,482 tons came from stopes.

Jucuara No. 8 Vein

This vein, although not shown on the Active List, produced 1,836 tons of fair grade ore. It is not expected that this vein will be an important producer.

Jucuara No. 9 Vein

Mentioned previously in this report is the discovery of this vein on the Lower 400 level. Development exposed ore of fair grade, now included in the ore reserves as 17,000 tons of 12 ounces silver per ton. 2,553 tons were extracted, all from development operations.

Old Mine Group

Catalina No. 2 Vein

An increase to the Active Ore Reserves of 6,967 tons, now making a total of 11,495, with a slight reduction in grade, was brought about by development on the Upper 150 level. From development operations 1,812 tons were extracted.

Exploration below the Peña Blanca level is of doubtful value.

Colonia Vein No. 1

The extraction of 12,144 tons from stopes and 514 tons from development, now leaves 92,621 tons of 13 ounces silver and .16 ounce gold per ton in the Active Reserves.

Crisanta Vein

Of the 2,484 tons produced, 2,107 tons came from development sources. Ore exposed on the Upper 450 level now permits the inclusion in the Active Reserve of 5,531 tons of 13 ounces silver and .02 ounce gold per ton.

Culebra Vein No. 1

From stoping operations 1,356 tons were extracted, still leaving 20,993 tons of moderate grade.

Culebra Vein No. 2

2,305 tons were mined, the bulk, or 2,222 tons, being from stopes. A tonnage of 16,234 of average grade remains.

Culebra Stringer Vein

Production from this vein yielded 5,265 tons, of which 47% came from development operations. The ore reserve shows 17,076 tons, an increase of 12,068 over last year with no change in grade.

South San Miguel Vein

Mining on a small scale produced 3,510 tons, stoping operations yielding 2,501. In the Active Reserve 20,766 tons are shown of 14 ounces silver and .05 ounce gold per ton.

Southwest No. 2 Vein

With the extraction of 1,435 tons, there is now left the small tonnage of 810 of low grade ore.

Southwest No. 3 Vein

3,623 tons were mined, of which 3,610 came from stopes. Mining at the same rate during 1945 will considerably reduce the small remaining tonnage of 3,920 shown in the Active Reserve.

Southwest No. 4 Vein

Production from this vein totalled 2,313 tons, all from stopes. 5,320 tons of good grade silver ore remain.

Southwest No. 5 Vein

97% of the total tonnage of 14,773 was derived from stopes. 9,293 tons of low grade ore appear in the Active List.

Southwest No. 10 Vein

This vein shows a reserve of 8,433 tons of 11 ounces silver and .06 gold per ton. During the year 4,403 tons were extracted, the greater part from stopes.

Miscellaneous Group

Santa Gertrudis No. 1 Vein

From stoping operations 6,231 tons were extracted, leaving 19,980 tons of average grade.

Other Veins

The following veins, not specifically mentioned above, produced a total of 7,967 tons: Buena Ventura, Capitana, Independencia, Jucuara Nos. 6 and 7, Northwest, Rosario, San Benito Nos. 1 and 2, San Miguel North, Santa Fe No. 2, Southwest Nos. 1, 6, 7, 8, 11 and 12, and Termopilas.

Ore Production

Ore production is summarized as follows:

	1941	1942	1943	1944
From Stoping (Tons)	152,874	162,598	155,712	167,263
From Development (Tons)	33,687	28,749	21,497	20,390
Total Tons	186,561	191,347	177,209	187,653

Tonnage production from development represents slightly less than 11% of the total compared to 12% during 1943. Present indications point to a somewhat better percentage for 1945.

General Mine Comments

Although new reserves will continue to be developed and partially offset depletion, they must come in large measure from branches and extensions of already known veins. The per ton value of future reserves to be developed may be lower in grade than existent ones. In order to lower costs and thereby increase profits from lower grade ore, ways and means to increase tonnage production are being considered.

It is planned to confine mining for another year to the same veins from which the major production came during 1944. Increased production may be expected from what is known as the Old Mine Group as recovery and further exploration of veins in that group progresses. An effort will be made to husband the better grade gold veins in the Santa Fe and San Benito districts with the exception of small isolated blocks that should be extracted before they become inaccessible.

Mining of all veins is becoming more costly as the outlying branches and extensions are gradually being eliminated. The decreased tonnage per machine consequent to such clean-up operations dictates the advisability of installation of additional compressed air capacity. In connection with the overall increased tonnage production program mentioned above such an installation is now being planned.

The Mill

Although the continued unavoidable use of local castings for wearing mill parts adversely affected production, the arrival of imported supplies improved notably over 1943, thereby permitting uninterrupted operation and a tonnage production second only to that of 1942.

General Comments on Rosario Property

A substantial decrease in the per unit cost of most supplies imported from the United States resulted from increased shipments through the Pacific port of entry, but the overall operating cost per ton remained about the same as for 1943. This is attributable partly to the increased cost of supplies imported from sources other than the United States; partly to increased power costs, accounted for by a more severe dry season and increased cost of diesel oil; but mainly to more difficult mining conditions as explained under the heading of "General Mine Comments."

The decreased per ton value of ore reserves necessarily involves milling lower grade ore; but if it be possible to complete present plans before the middle of the year, increased tonnage production may well offset any loss in earnings from the use of such ore.

The abnormally high cost of local foodstuffs proved a great hardship for our workmen and their families. To counteract this condition we purchased 150 tons of corn and 70 tons of beans at the high market prices, but sold these commodities to our workmen at the usual normal prices.

New Properties

El Mochito Mine

This property is located in Honduras and was purchased in 1943. It has been developed to an extent that reveals 70,000 tons of twenty dollar ore. The equipment of this property during the present year will depend upon securing the necessary authorizations for such equipment; and as to this, it is not possible to express a definite opinion at this time.

El Dorado Mine

This property, situated in the Republic of El Salvador, and also purchased in 1943, has not yet been developed to the point where consideration of a production plant is warranted. It is expected that by midyear of 1945 plans may be formulated.

Company Staff

The lack of an adequate staff, due to the war, continues to create many difficulties, but which, it is a pleasure to report, have been well overcome by the loyal cooperation of all remaining members. They deserve unqualified recognition for their continuous and untiring efforts.

Respectfully submitted,

K. H. MATHESON,
General Manager.

ANNEX "A"

Active Ore Reserves for 1944

Estimated Reserves (13 & 14 cu. ft. per ton)	Average Width Feet Vein	Waste	Stope	Tons Ore & Waste	Av. Troy Ozs. Per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Independencia Group								
San Blas—No. 2	1.01	1.72	2.73	18,070	10	.07	181,095	1,349
Salvador Group								
Salvador	1.62	1.66	3.28	26,876	17	.03	447,095	885
Jucuara No. 1 (Fortuna	2.22	1.58	3.80	110,446	19	.04	2,142,602	4,618
Fortuna—North	1.87	1.49	3.36	2,630	21	.04	54,769	105
Fortuna—Vein Br.	2.10	1.40	3.50	4,192	12	.03	49,891	119
Jucuara Group								
Jucuara—2	2.63	2.48	5.11	34,683	17	.19	573,086	6,665
Jucuara—3	1.64	1.98	3.62	13,117	10	.22	126,950	2,888
Jucuara—4	1.68	1.89	3.57	19,897	23	.06	451,392	1,195
Jucuara—5	2.60	1.90	4.50	2,160	14	.10	31,200	212
Jucuara—9	1.51	1.99	3.50	17,000	12	.08	197,777	1,357
Santa Fe Group								
Santa Fe—1	2.27	1.41	3.68	6,787	13	.18	89,354	1,211
Santa Fe—2	2.43	2.89	5.32	44,166	46	.44	2,032,119	19,401
Santa Fe—3	2.35	1.65	4.00	6,230	32	.36	201,688	2,246
San Benito—1	1.30	1.70	3.00	12,911	17	.12	215,049	1,589
San Benito—2	1.76	1.28	3.04	32,065	22	.25	692,502	8,092
Old Mine Group								
Capitana—1	0.63	2.37	3.00	4,639	5	.18	20,960	823
Capitana—2	1.15	1.35	2.50	1,923	4	.09	7,965	176
Catalina—2	1.40	1.60	3.00	11,495	16	.02	187,868	222
Colonia—1	1.37	2.08	3.45	92,621	13	.16	1,205,028	14,986
Colonia—2	1.38	1.62	3.00	1,602	11	.10	17,541	163
Crisanta—1	1.25	1.50	2.75	5,531	13	.02	72,852	127
Crisanta—2	0.61	2.39	3.00	4,823	13	.03	64,458	149
Culebra—1	1.56	1.44	3.00	20,993	14	.03	303,398	586
Culebra—2	1.84	1.25	3.09	16,234	18	.06	285,479	983
Culebra Stringer	1.84	1.54	3.38	17,076	11	.03	194,043	511
Guadalupe	1.88	1.12	3.00	2,167	12	.09	26,846	205
Nueva (Part)	0.84	2.16	3.00	6,919	9	.11	61,012	760
Rosario—2	2.19	0.81	3.00	2,245	9	.12	21,307	279
Rosario Stringer	1.23	1.77	3.00	3,318	11	.09	35,259	299
South West—2	1.93	1.57	3.50	810	9	.12	7,167	101
South West—3	1.44	3.06	4.50	3,920	20	.04	78,203	142
South West—4	1.35	3.15	4.50	5,320	26	.09	139,063	501
South West—5	1.78	2.22	4.00	9,293	13	.07	121,883	626
South West—7	1.40	1.60	3.00	10,147	16	.12	160,743	1,225
South West—10	1.37	2.13	3.50	8,433	11	.06	96,406	542
South West—12	0.76	2.24	3.00	2,498	13	.03	32,819	78
San Joaquin	1.00	2.00	3.00	3,538	19	.28	68,717	987
San Miguel South	1.71	1.29	3.00	20,766	14	.05	282,117	1,127
Termópilas	1.67	1.62	3.29	6,464	14	.13	90,991	832
Other Veins								
Veta 4 South	1.36	1.64	3.00	27,990	19	.03	534,794	800
Veta 4 North	1.73	1.27	3.00	2,712	14	.04	39,100	109
Santa Gertrudis—1	1.59	1.47	3.06	19,980	17	.10	337,585	2,048
Santa Gertrudis—2	1.56	1.44	3.00	946	8	.06	7,380	54
				665,633	18.01	.1222	11,987,563	81,373
Broken Ore In Stopes (21.0 cu. ft. per ton)								
Veins								
Colonia				150				
Culebra—1				1,120				
Culebra—2				270				
Culebra Strg.				142				
Crisanta				360				
Jucuara—1				25,791				
North West				790				
Salvador				4,770				
San Benito—1				268				
San Benito—2				16				
Santa Fe—1				7,193				
Santa Fe—2				1,508				
Santa Gertrudis				800				
Mine Storage Chutes				2,187				
Mill Ore Bin				429				
				45,794	22.12	.0846	1,013,080	3,873
Total Active Reserve as of Jan. 1, 1945				711,427	18.27	.1198	13,000,643	85,246

ANNEX "B"

Inactive Ore Reserves

Estimated Reserves at 13 cu. ft. per ton

Veins	Tons of Ore & Waste	Av. Oz. Per Ton Ag.	Au.	Total Ounces Ag.	Au.
Candelaria — Branch 1	2605	6	.07	15012	175
Esperanza (South San Miguel Extension South)	5481	14	.04	74900	195
Nueva (Part)	4269	9	.09	37746	374
Porvenir	2088	13	.03	27189	53
Total	14443	11	.06	154847	797

Note on Reserves:

While it is inherently probable that the tonnages and grades when actually mined from these individual veins will vary somewhat, up or down, from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

GENERAL STATISTICS

	Year 1944		Year 1943	
Number of Men employed per working day	1,084		1,104	
Tons of ore mined	174,745		185,133	
Tonnage mined from October 1, 1907 to December 31, 1944:				
From stoping	3,475,344		3,308,964	
From development	696,245		675,855	
From fills	239,131		238,248	
	4,410,720		4,233,067	
Power Statistics				
Rainfall	48.48 Inches		41.93 Inches	
Power Sources	*Kilowatt Hrs*	*%*	*Kilowatt Hrs.*	*%*
San Juancito Plant	4,701,850	49.31	5,129,230	52.26
Guadalupe Plant	3,007,060	31.53	2,871,510	29.26
Aguacatal Plant	993,900	10.42	1,248,900	12.73
Diesel Plant	833,300	8.74	564,100	5.75
	9,536,110	100.00	9,813,740	100.00
		Per KWH		*Per KWH*
Hydro power—cost of	$17,819.	.0020475	$17,329.	.0018735
Diesel power—cost of	$18,976.	.0227727	$13,749.	.0243747
Total	$36,795.	.0038585	$31,078.	.0031669
Assay Office and Laboratory				
Assays run—number	50,087		47,699	
Total cost	$13,025.		$12,205.	
Cost per assay	$ .26		$ .26	
Educational (Schools)	$13,470.		$14,546.	
Medical Department				
Maintenance	$ 7,754.		$ 8,297	
Cases handled	10,972		10,404	
Miscellaneous				
Police and Watchmen	$16,193.		$16,100.	
Mine Hotel	$ 8,118.		$ 8,776.	
Care of Roads	$ 9,863.		$10,417.	
Agencies	$ 3,907.		$ 3,753.	

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NEW YORK AND HONDURAS ROSARIO MINING COMPANY

1946-1952,
1957



SIXTY-SIXTH ANNUAL REPORT

NINETEEN HUNDRED AND FORTY-SIX

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NEW YORK AND HONDURAS ROSARIO MINING COMPANY

OFFICERS

April 3, 1946 to April 2, 1947

WM. A. PRENDERGAST, *President*

LEWIS L. CLARKE, *Chairman of Board*
R. F. GOODWIN, *Vice-President*
W. C. LANGLEY, *Treasurer*
J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

April 3, 1946 to April 2, 1947

LEWIS L. CLARKE, *Chairman*

JULIAN B. BEATY
R. F. GOODWIN
DR. J. RALPH JACOBY
HERBERT A. KAUFMANN
W. C. LANGLEY
LESTER S. OPPENHEIMER
WM. A. PRENDERGAST
M. F. SOTO
RICHARD H. VALENTINE

EXECUTIVE COMMITTEE

April 3, 1946 to April 2, 1947

LEWIS L. CLARKE, *Chairman*
JULIAN B. BEATY
R. F. GOODWIN
DR. J. RALPH JACOBY
M. F. SOTO

WM. A. PRENDERGAST
W. C. LANGLEY
Ex-Officio

PRESIDENT'S REPORT

March 10, 1947

To the Stockholders of the
New York and Honduras Rosario Mining Company:

In respect to earnings achieved, this is the most favorable Annual Report that has ever been submitted on behalf of your Company. The main credit for this result must be attributed to that wholly impersonal factor known as the "Market Price" which, for silver (90⅜¢), was the highest since the early part of 1920. Although this price was reduced in the month of December, we realized for the entire silver production of 1946, a price of $.89231 per ounce.

The propitious nature of a company's relations with the government of the country in which it is doing business is a contributing influence to the success of its operations, and I wish to record our appreciative high regard for President Tiburcio Carias A, and his countrymen.

Death of Mr. Harry A. Guess (Vice President and Director.)

It is appropriate that there should be recorded in this Annual Report the death on April 11th, 1946, of Mr. Harry A. Guess who, since 1916, was a Director, and from 1920, a Vice-President and Director of this Company. Mr. Guess was preeminent in the profession of Mining Engineering, and of unusually high business capacity. During the years of our association with him, this Company was the beneficiary, in plenteous measure, of his experience and talents. (Requiescat in pace).

General Manager's Report (Pages 14-30).

Your special attention is directed to the comprehensive report of our General Manager, Mr. K. H. Matheson. In the last Annual Report I stressed the fact of the continuing reduction in the value of our "Ore Reserves", and the facts disclosed at the end of 1946 necessitate, in my judgment, an even more specific reference to this subject. The course of our reserve values has been persistently downward for the past ten years. The facts of this condition have been set before you in each Annual Report, but it may be that their significance has not been fully realized. The figures given in the Annual Reports for the period mentioned show:

In 1936 the average value of our silver reserves was 28.84 oz. per ton; gold .1832 oz. per ton;

On December 31, 1946, silver 16.66 oz.; gold .1077 oz.;

A loss of 12.18 oz. silver and .0755 gold, or *42-28/100%* silver and *41-21/100%* gold.

During the last half of 1946, in view of the favorable silver price the grade of ore used was materially reduced, with the result that the average per ton of silver milled in 1946 was 14.5869, compared with 16.9730 oz. in 1945, and gold .06277 oz., contrasted with .09412 in 1945.

It is, therefore, apparent that the future of the property depends on the judicious utilization of our reserves, by treating lower grades during a period when the prices of silver are high, compared with the years from 1935 to 1945. This policy will naturally reduce earnings, but it constitutes a justifiable sacrifice in order to save our higher grade ores for years when silver prices may not be as satisfactory as at present, and most important, prolong the life of the property

It has been determined to use a grade of 12 oz. silver and .065 gold for the present, and make such adjustments later in the year as conditions may require. The foregoing statements are made without respect to any additional discoveries that may be made in the exploration work planned for this year. No additions to earnings in 1947 can be expected from the new properties as neither El Mochito nor El Dorado will be in operation until the beginning of 1948.

Probable Earnings in 1947.

The estimate for this year, based upon —

(1) The grade of ore to be used;
(2) The present production costs; and
(3) The *present* price of silver,

is *$3.00* per share.

Other Properties

The Report of the General Manager (Pages Nos. 28-29) explains the present status of these properties. The present financial outlook, as far as *investment* is concerned, in the El Mochito and El Dorado properties, is as follows:

El Mochito, Honduras

The anticipated outlay for this property (August 1945) was $600,000.00. The greatly increased cost of equipment and supplies and incidental construction costs will raise this figure to $950,000.00. According to present production estimates this investment should be returned within about two years from the time the property will be put into operation. The expenditures to December 31, 1946, were $596,269.84. The sum necessary to complete the property for production will be expended in this year.

New York and El Salvador Mining Company, Inc. (El Dorado).

This Company has been organized under the laws of the State of New York and authorized to do business in the Republic

of El Salvador, C. A., to handle the operations of the El Dorado property, and such other enterprises as the Company may conduct in that Republic.

The Officers and Directors of the Company are all Officers and Directors of the New York and Honduras Rosario Mining Company. The capital stock is $50,000.00, consisting of 500 shares of common stock of the par value of $100.00 each. The Rosario Company has subscribed and paid for 400 shares of this stock, which is the only outstanding stock at the present time, and will finance the new company until such time as its affairs are on a self-sustaining basis.

The estimate made in August 1945 of the expenditures to put the El Dorado property into production was $400,000.00. The same upward tendency of costs referred to in respect to El Mochito apply to this property, and the investment will probably reach a figure of $650,000.00 The outlays on this property to December 31, 1946, were $274,073.57; and the difference between this figure and the full investment will have to be financed this year.

The expenditures to December 31, 1946, on the other properties now under study are —

The Mines of Yuscaran (Honduras)	$146,708.15
El Tránsito (Honduras)	49,858.28
Aguacate District (Costa Rica)	133,637.86

Neptune Gold Mining Company.

The Company's investment in this property stands at the same figure shown a year ago, of $142,566.89 of 5% Income Debenture Notes, interest on which has been paid to December 31, 1946. A copy of the Annual Report of this Company will be mailed to you when issued.

Honduras Income Tax.

In the Annual Report for the year 1945, you were advised that the Federal Income Tax Bureau had disallowed the payments of 7% on Net Income made to the Government of Honduras for the years 1941 and 1942, as credits against Income Taxes paid to the Government of the United States of America, and that the subject had been carried to the Tax Court of the United States. The case has been heard by the Court and we are now awaiting its decision.

General Financial Statistics.

	1946	1945
Earnings	$1,054,146.16	$ 781.538.70
Per Share	5.67	4.21
Dividends Paid	826,026.40	649,712.00
Per Share	4.45	3.50
Reservations	40,000.00	85,000.00
Accretions to Surplus	188,119.76	46,826.70
Income from Investments	90,723.33	133,229.28
Marketable Securities Owned as at December 31st		
Cost	1,905,516.21	1,905,516.87
Market	2,036,230.89	2,058,273.60
Difference between Cost and Market	Plus 6-86/100%	Plus 8-02/100%

The Bullion Production from the organization of the Company to December 31, 1946, amounts to $76,611,844.00, and the dividends paid therefrom were $19,127,801.00.

There is submitted with this Report and made a part hereof:

1. A Comparative Statement of Operations for the years 1946 and 1945 (Page 6) and other operational statistics (Page 30).

2. A Comparative Income and Profit and Loss Statement for the years ended December 31, 1946, and December 31, 1945.

3. A Balance Sheet for the year ended December 31, 1946.

4. A Statement of the Surplus Account for the year ended December 31, 1946.

5. A List of the Securities held by this Company December 31, 1946

Respectfully submitted,

WM. A. PRENDERGAST,
President.

Comparative Statement of Operations

Years ended December 31, 1946 and December 31, 1945

	Year 1946	Year 1945	Increase Decrease*
Tons of ore milled	202,200	193,000	9,200
Average tons milled per day, full running time	578	551	27
Ounces of silver recovered	2,682,910.32	3,003,494.89	320,584.57*
Number of ounces of silver recovered per ton of ore	13.26860	15.56215	2.29355*
Silver recovered—percentage	90.962454	91.687455	.725001*
Sales value of silver recovered	$2,393,989.50	$1,785,301.17	$608,688.33
Average sales value of silver per ounce	$ .89231	$ .59441	$ .29790
Average cost of silver per ounce**	$ .35896	$ .26642	$ .09254
Average profit on silver per ounce	$ .53335	$ .32799	$ .20536
Average sales value of silver recovered per ton of ore	$ 11.83971	$ 9.25026	$ 2.58945
Average cost of silver per ton of ore**	$ 4.76294	$ 4.14611	$ .61683
Average profit on silver recovered per ton of ore**	$ 7.07677	$ 5.10415	$ 1.97262
Ounces of gold recovered	12,093.584	17,077.670	4,984.086 *
Number of ounces of gold recovered per ton of ore	.05981	.08849	.02868 *
Gold recovered—percentage	95.2786	94.0142	1.2644
Sales value of gold recovered	$ 432,881.14	$ 597,718.53	$164,837.39 *
Average sales value of gold per ounce	$ 35.79	$ 35.00	$ .79
Value of gold recovered per ton of ore	$ 2.14086	$ 3.09699	$ .95613 *
Number of bars of bullion shipped from mine	1,567	1,760	193 *
Ratio of gold to silver	1:222	1:177	:045

**After credit for sales value of gold recovered.

Income and Profit and Loss Statement

Years ended December 31, 1946 and December 31, 1945

	Year		Increase
	1946	1945	Decrease*
Production of gold and silver	$2,826,870.64	$2,383,019.70	$443,850.94
Less freight and other expenses on bullion	96,005.77	103,629.04	7,623.27*
OPERATING INCOME	$2,730,864.87	$2,279,390.66	$451,474.21
Operating Expenses	1,179,261.63	1,200,202.46	20,940.83*
MINE OPERATING PROFIT	$1,551,603.24	$1,079,188.20	$472,415.04
New York administrative and general expenses	120,679.65	94,085.72	26,593.93
NET OPERATING PROFIT	$1,430,923.59	$ 985,102.48	$445,821.11
Add income from investments, etc.	90,723.33	133,229.28	42,505.95*
	$1,521,646.92	$1,118,331.76	$403,315.16
Less other deductions from income (Note A)	6,592.72	10,867.76	4,275.04*
PROFIT BEFORE TAXES ON INCOME	$1,515,054.20	$1,107,464.00	$407,590.20
Taxes on income—estimated Provision for the year:			
Federal normal income tax and surtax	388,000.00	280,000.00	108,000.00
Government of Honduras, C.A.	72,908.04	45,925.30	26,982.74
TOTAL TAXES	$ 460,908.04	$ 325,925.30	$134,982.74
NET PROFIT FOR YEAR (Note B)	$1,054,146.16	$ 781,538.70	$272,607.46
Transferred to reserve for wage adjustments	40,000.00	—0—	40,000.00
Transferred to reserve for special expansion projects	—0—	85,000.00	85,000.00*
Balance transferred to earned surplus	$1,014,146.16	$ 696,538.70	$317,607.46
NOTE A—Other deductions from income include:			
New York State franchise tax, New York City gross receipts tax, etc.	$ 2,416.47	$ 2,184.84	$ 231.63
Obsolete inventory written off	—0—	1,332.34	1,332.34*
Business association dues, subscriptions and donations	2,965.00	6,191.60	3,226.60*
Interest paid	614.59	667.57	52.98*
Sundry	596.66	491.41	105.25
	$ 6,592.72	$ 10,867.76	$ 4,275.04*

NOTE B—The above statement reflects the operations of New York and Honduras Rosario Mining Company only, since that Company's subsidiary, New York and El Salvador Mining Company, Inc., which was incorporated in 1946, had at December 31, 1946 not yet started production.

CONSOLIDATED
DECEMBER

ASSETS

CURRENT ASSETS			
Cash		$ 528,864.12	
Bullion at smelters and in transit — at realizable value less allowance for expenses		232,243.01	
Marketable securities—at cost (aggregate quoted market prices $130,714.68 in excess of such costs)			
United States Government obligations	$1,170,060.62		
Municipal bonds	174,776.26		
Domestic Corporation bonds	147,612.67		
Domestic Corporation stocks	413,066.66		
	$1,905,516.21		
Interest accrued on bonds	4,475.25	1,909,991.46	
Accounts receivable		29,744.09	
Broken ore in stopes and mill bins — at cost		206,377.91	
Inventories — materials and supplies — at cost		571,574.74	
TOTAL CURRENT ASSETS			$3,478,795.33
INVESTMENTS AND OTHER ASSETS			
Neptune Gold Mining Company, ten year 5% income debenture notes due March 1, 1948, principal amount $142,566.89, and 5100 shares of its capital stock of no par value — at cost		$ 142,566.89	
Sundry securities		1,552.36	144,119.25
PREPAID ITEMS, ETC.			
Balance at December 31, 1945 of advance to Government of Honduras, C. A. under Decree #67	$ 94,433.37		
Less amount applicable to the year 1946 — estimated	72,908.04	$ 21,525.33	
Inventories of supplies, prepaid insurance, taxes and other expenses		136,438.51	157,963.84
BUILDINGS, MACHINERY AND EQUIPMENT			
At cost		$2,417,552.62	
Less allowance for depreciation		2,037,186.63	380,365.99
MINES, REAL ESTATE AND CONCESSIONS			
At valuation originally established in 1880		$1,500,000.00	
Less allowance for depletion and $207,411.48 charged to earned surplus at December 31, 1944		1,500,000.00	
		$ —0—	
New mining properties and development expenses thereon not yet in production — at cost		1,200,547.70	1,200,547.70
			$5,361,792.11

BALANCE SHEET
31, 1946

LIABILITIES

CURRENT LIABILITIES

Dividends payable — January 4, 1947	$ 241,321.60	
Accounts payable	166,589.19	
Drafts payable	47,847.95	
Federal and other taxes — estimated	450,092.19	
TOTAL CURRENT LIABILITIES		$ 905,850.93

RESERVES

For special expansion projects	$ 85,000.00	
For wage adjustments	40,000.00	
For contingencies	25,000.00	150,000.00

CAPITAL STOCK AND SURPLUS

Capital stock (par value $10.00 per share) :			
Authorized and issued	188,367 shares	$1,883,670.00	
Less in treasury	2,735 shares	27,350.00	
Outstanding	185,632 shares	$1,856,320.00	
Earned surplus		2,449,621.18	4,305,941.18

$5,361,792.11

Statement of Surplus

Year ended December 31, 1946

EARNED SURPLUS			
Balance at January 1, 1946			$2,261,537.42
Add balance of net profit for the year			1,014,146.16
			$3,275,683.58
Deduct dividends paid or provided for, totalling $4.45 per share:			
March 30, 1946	$ .85 per share	$157,787.20	
June 28, 1946	1.15 per share	213,476.80	
September 28, 1946	1.15 per share	213,476.80	
Payable January 4 ,1947	1.30 per share	241,321.60	826,062.40
Balance at December 31, 1946			$2,449,621.18

Marketable Securities

December 31, 1946

	Par Value	Quoted Market Prices December 31, 1946	
UNITED STATES GOVERNMENT SECURITIES			
Treasury bonds: 2½% due December 15, 1972-67	$1,000,000.00	$1,028,750.00	
Savings bonds: 2½% Defense Series "G" due May 1, 1953	50,000.00	50,000.00	Note
2½% Defense Series "G" due January 1, 1955	100,000.00	100,000.00	Note
Federal Land Banks, Consolidated Federal Farm Loan Bonds 2¼% due February 1, 1955-1953	20,000.00	20,600.00	
NEW YORK CITY BONDS			
3% Corporate Stock for Transit Unification, Series R-31, due June 1, 1980	175,000.00	199,281.25	$1,398,631.25
DOMESTIC RAILROAD BONDS			
St. Louis-San Francisco Railway Co., Prior Lien Mortgage 5% Gold Bonds, Series "B", due July 1, 1950	50,000.00	$ 27,500.00	
New Orleans, Texas and Mexico Railway Co., 1st Mortgage 5½% Gold Bonds, Series "A", due April 1, 1954	25,000.00	22,500.00	
Chicago and North Western Railway Co., 2nd Mortgage, Convertible Income Bonds, 4½%, Series "A", due January 1, 1999	4,952.63	4,024.01	
Wabash Railroad Co., 1st Mortgage 3¼%, Series "B", due February 1, 1971	50,000.00	49,875.00	103,899.01
DOMESTIC PUBLIC UTILITY BONDS			
Joplin Water Works Co., 1st Mortgage 5% Gold Bonds, Series "A", due March 1, 1957	25,000.00	$ 26,375.00	26,375.00
STOCKS	No. of Shares		
American Chicle Co., common stock, no par	500	75,000.00	
American and Foreign Power Company Inc., $7.00 cumulative preferred stock, no par	500	57,000.00	
Chicago and North Western Railway Co., 5% Series "A", preferred stock	65.0301	2,958.87	
(FORWARD)			$1,528,905.26

Marketable Securities — *Continued*

December 31, 1946

	Number of Shares	Quoted Market Prices December 31, 1946	
(FORWARD)			$1,528,905.26
STOCKS (continued)			
Chicago and North Western Railway Co., common stock, no par, stated at $100.00 per share	102.7132	2,054.26	
The Commonwealth and Southern Corp., $6.00 cumulative preferred stock, no par	550	67,100.00	
The Home Insurance Co., capital stock, par value $5.00 per share	1,500	34,500.00	
Iowa Southern Utilities Company of Delaware: common stock, par value $15.00 per share	2,100	32,025.00	
Jersey Central Power and Light Co., 4% cumulative preferred stock, par value $100.00 per share	500	50,375.00	
Public Service Co. of Indiana, Inc., common stock, no par	500	21,875.00	
Standard Oil of California, capital stock, no par	500	28,812.50	
Standard Oil of New Jersey, capital stock, par value $25.00 per share	1,000	69,125.00	
Socony Vacuum Oil Co., capital stock, par value $15.00 per share	1,500	22,125.00	
San Jose Water Works Co., common stock, par value $25.00 per share	500	21,250.00	
California Water Service Co., common stock, par value $25.00 per share	625	23,125.00	507,325.63
			$2,036,230.89
OTHER INVESTMENTS (at cost)			
Neptune Gold Mining Company, ten year 5% income debenture notes due March 1, 1948, principal amount $142,566.89 and 5100 shares of its capital stock of no par value			$ 142,566.89

NOTE—At face value.

Report of Auditors

To the Stockholders of
New York and Honduras Rosario Mining Company:

We have examined the consolidated balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY and its subsidiary, NEW YORK AND EL SALVADOR MINING COMPANY, INC. as of December 31, 1946, and the statements of profit and loss and surplus for the year then ended, have reviewed the system of internal control and the accounting procedures of the Companies, including minutes of stockholders' and directors' meetings, and have examined or tested accounting records of the Companies and other supporting evidence at their offices in New York and at the mine, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary.

Cash, securities and bullion were verified by actual count, inspection of documents and by direct communication with custodian or depositaries.

In our opinion, the accompanying balance sheet and related statements of profit and loss and surplus present fairly the consolidated position of NEW YORK AND HONDURAS ROSARIO MINING COMPANY and its subsidiary at December 31, 1946, and the results of operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST.

New York, N. Y.
February 27, 1947.

GENERAL MANAGER'S REPORT

January 1, 1947.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company.

Gentlemen:

We submit the following report covering your operations in Central America during 1946.

THE ROSARIO MINE

Ore Reserves

Ore Reserves are segregated into two groups. Those listed as Active Reserves, appearing in Annex "A", are based on silver at 70 cents and gold at $35.00 per Troy ounce. Inactive Reserves, shown in Annex "B", are not commercially usable at the present price.

Active Ore Reserves

	Tons Ore Plus Waste	Av. Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
January 1, 1946	709,002	17.52	.1120	12,425,207	79,432
January 1, 1947	687,691	16.66	.1077	11,458,810	74,036
Decrease	21,311	.86	.0043	966,397	5,396

Inactive Ore Reserves

January 1, 1946	6,874	8.00	.08	52,758	549
January 1, 1947	48,435	7.27	.0575	352,189	2,785
Increase	41,561			299,431	2,236
Decrease		0.73	.0225		

During the short period at which silver commanded 90 cents an ounce it was possible to rehabilitate old sections of the mine, thus making accessible a greater tonnage of low grade ore, represented in large part by the Inactive Reserves listed. Some ore, thus made available at a suitable price level, is included in the Active List.

Attention is specifically called to the per ton content of the individual vein reserves in Annex "A", all of which are minable at 70 cents silver.

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet
1945	13,914	9,363	10,288	33,565
1946	13,940	6,671	8,014	28,625
Decrease		2,692	2,274	4,940
Increase	26			

More limited fields for exploration, coupled with increased effort to make old mine workings accessible, accounts for the considerable decrease. Inasmuch as the better fields for future exploration lie on several veins, above and below the present workings, it is proposed to do extensive diamond drilling during 1947. A long crosscut is also under way to cut the Rosario Vein on the Lower 1150 level. Reopening of sections of the old mine also offers a new limited field for additional exploration.

Development prospects remain about the same as a year ago.

Operating Crosscuts & Raises

To facilitate stoping the Culebra Stringer Vein it was necessary to continue ore pass No. 35 from the Upper 550 to the Upper 650 level.

Operational crosscuts on Upper 550 and Upper 650 levels to connect with ore pass No. 35 amounted to 75 feet. No further work for the present is anticipated.

Exploration Crosscuts Above
The Peña Blanca Level

Upper 600 Culebra Stringer

Crosscut No. 16, which was started in Block 42, was driven southeast a distance of 129 feet, the object being to search for any branch stringers that might have been missed on the Rosario or Culebra Stringer veins. No veins were encountered, so the crosscut was discontinued.

Another crosscut was started off the Culebra Stringer Vein in Block 51 and driven northwest for a distance of 116 feet to cut the upper reaches of the known vein on the Upper 500 level, which was displaced by the intersection with the Culebra No. 1 and Culebra No. 2 veins. At 70 feet a small stringer was cut which probably will lead to the vein. Raise No. 11 from the Upper 500 level, 180 feet west of this crosscut, is in average grade ore to the Upper 600 elevation. There is every reason to believe we can add to the reserve on the Culebra Stringer Vein during the year. Active work will be continued.

Upper 600 Buena Ventura

A raise known as No. 3 in Block 46 was driven from the Upper 500 level to the Upper 600 on this vein, but in very poor

values. The vein is well defined. From the top of this raise, or at the Upper 600 elevation, a crosscut was driven for a distance of 160 feet to cut any extension of the Rosario Stringer Vein No. 1 that exists on the Upper 500. Most of this crosscut is in broken up, faulted country. A few stringers were cut, but nothing of importance disclosed.

Any future work on Rosario Stringer Vein No. 1 will be done by stoping operations from the Upper 500, if silver prices permit.

Upper 450 Jucuara No. 1

Crosscut No. 46 was started in Block 76 and driven northeast to cut the downward projection of the Jucuara No. 1 Vein on the Upper 550 level. At 230 feet a fault with some quartz was cut, but drifting on it proved disappointing. The crosscut was continued another 50 feet where a vein was cut which has the strike and dip of the Santa Gertrudis Vein No. 2. To date 140 feet of drifting has exposed fair grade ore which gives indications of extending probably to the Upper 550 and Upper 350 levels respectively. Work will be started on both of these levels early in 1947. No large body of ore can be expected.

A crosscut was started in Block No. 79, known as No. 47, and driven for a distance of 377 feet to crosscut the territory west of the Southwest Fault, west of which no real veins have yet been found, with the exception of the Jucuara gold group. At 145 feet a narrow, hard quartz stringer was intersected, with some values, but of no importance. Some additional work will be done on this stringer during 1947, but it holds very little hope of producing ore.

Upper 350 Culebra Stringer Vein

As the Culebra Stringer Vein approaches the Rosario Group to the east it is badly shattered and faulted, but gives every indication of being a westward continuation of the Rosario Group.

In Block 43 a crosscut was started from it and driven northeast for a distance of 220 feet. At 110 feet the Rosario Stringer Vein was cut and to date 200 feet of lateral development has been accomplished. Although this ore is relatively low grade it will be included in Annex "A". It is proposed to continue this crosscut in 1947 as it presents better than average possibilities of cutting new veins.

Upper 350 Candelaria

This crosscut, stopped in 1943 due to war conditions and lack of personnel, was resumed late in December of 1946 and was advanced 28 feet. It is proposed to continue to the Buena Ventura and West Veins. This will explore between the Guadalupe and Buena Ventura, and should cut the south extension of the Socorro Vein.

In line with the program of mining all old fills that the price of silver will permit, a crosscut was started in Block 40 off the Candelaria Branch No. 1 Vein and driven to the main Candelaria. The fills in this section will be made available through this crosscut.

Upper 150 Salvador

Crosscut 52 was driven an additional 180 feet during the year. At 70 feet the Salvador Stringer Vein, which produced a small tonnage on the Zero Level, was cut. Some ore will be mined, but it is not sufficiently large to be included in reserves.

Upper 150 San Blas No. 1

In an effort to get the ore which had been mined from the Active Reserve list below the Upper 250 level, due to the silver price, a crosscut known as No. 56-S was started in Block 78 from a stringer opened last year in the footwall of the San Blas. It was driven 110 feet southwest. At 80 feet the San Blas Fault Vein was encountered, with some signs of ore, but very badly broken up. This fault was drifted on for 150 feet west, showing no worthwhile values. Another crosscut was driven from this work in Block 80 northeast into the footwall of the San Blas for 80 feet. No vein was found, so a raise was started at 45 feet and driven vertically to cut the projection of the vein. At track plus 50 feet the vein was again cut, but carrying better values. The raise was continued on the vein to the Upper 250. This permits the blocking out of some San Blas—1 ore in Annex "A", but due to the excessive dilution it will require at least 70 cents silver to show a profit.

Crosscuts Below the Peña Blanca Level

Zero Santa Gertrudis

This crosscut, known as No. 24, was started from the south end of the Zero level in Block 70 and driven west 240 feet, to prove up the possibilities of a vein being in the footwall. As nothing was encountered, the crosscut was stopped.

A raise will be driven from Drift No. 24 in Block 70 to the Upper 150 and Upper 250 levels to recover a block of ore that was left under the Upper 250 level when the Upper 150 level under it was abandoned several years ago. This will also give access to the Upper 250 level again for future possible development.

Lower 200 Jucuara No. 3

In the 1945 report, under Crosscut No. 81, it was proposed to do additional work in this part of the mine. From the crosscut a narrow vein was drifted on to the east for 80 feet, showing only erratic values. A crosscut, known as No. 83, was started in Block 83 and advanced a total of 320 feet. Having passed the projection of the known stringers on the Lower 300 level and not

encountering any vein of importance, the crosscut was discontinued late in the year. No further work is proposed.

Lower 200 Southwest No. 1

Drift No. 7 on this vein was actively developed during the year and produced one good stretch of ore 200 feet in length. It was driven 550 feet on vein, and in Block 88 a crosscut was started southwest and advanced 320 feet. Additional work is planned during 1947 by driving a crosscut south in Block 91 to cut the upward projection of a known Salvador branch vein on the Lower 300 level. The prospects are not considered good, but they must be investigated

Lower 400 Salvador

A crosscut was proposed in last year's report to start in the eastern end of the Salvador Vein to drive to the Carmen Vein under its bottom level, the Lower 300. A fault vein in Block 71, which had the more or less general direction of the proposed crosscut, was followed for a distance of 380 feet. A few small pockets of ore were found on it, but nothing of importance. In Block 67 the fault was dropped and the crosscut, No. 123, was put on lines to cut the Carmen.

The Carmen Vein was cut in the last few days of December. It carries fair values over a good width. Intensive development will be pursued on this vein during 1947, on the Lower 400.

As this vein is followed to the east, at some suitable place a new crosscut from the Carmen to the Veta 4 South Vein will be driven to cut the downward extension of the ore in Block 62 on the Lower 200 level around Raises Nos. 33 and 37. It is believed that the Veta 4 South and Veta 4 North offer a favorable chance of adding considerably to our low grade ore reserves.

However, it must be borne in mind that all ore heretofore found on the Veta No. 4 South has been in a very hard, narrow vein, costly to mine, and this is also expected at depth. Also Veta No. 4 North, which in most places is oxidized and badly broken up, cannot be mined without excessive dilution, which will require at least a 60-cent silver price for it to be mined at a profit.

Lower 500 Jucuara No. 2

Crosscut No. 50 was started in Block 92 and driven northeast for a distance of 240 feet. The purpose of this was to cut the downward projection of a fault vein on the Lower 400 level which had good values in places, but inconsistent.

At 80 feet an unknown fault vein with some values was cut, and this was drifted on for a distance of 360 feet. At 100 feet east of the crosscut, a raise, No. 36, was driven in good ore to the Lower 400 level. This raise, after going up about 40 feet vertically, joined the old 56 Fault Vein, and for mapping reasons we have blocked this ore on the latter.

At a distance of 220 feet to the east of the crosscut, and from the vein, a short crosscut was driven to cut the downward projection of the Jucuara No. 4 in Block 87. The Jucuara No. 4 was cut at 25 feet from the fault vein and has added a small but good block to the Active Reserves.

165 feet in on Crosscut No. 50 the vein that the crosscut was intended for was cut. The values are disappointing, but some ore will be taken from the vein. No active reserve will be listed for 1947, but it will be further developed during the year and will be known as Jucuara No. 11.

Lower 650 Rosario

Crosscut No. 22, mentioned in last year's report, was driven an additional 407 feet. The downward projection of Rosario No. 2 Vein was cut and opened up for a distance of 140 feet. The values and width are disappointing. It is proposed to raise to the Lower 300 during 1947 and it is hoped that the 400 level will disclose enough ore to pay for this work.

Lower 650 Salvador

Crosscut No. 25, which was started in Block 75, was driven a total of 260 feet to cut any continuation downward of some good ore mined on the Lower 500 level. Nothing of interest was cut and the crosscut has been discontinued. It is proposed to drive a raise from the Lower 650 level to the Lower 500 during the year to find the bottom limits of the ore.

Lower 650 North West Branch 1

Crosscut No. 27 was started in Block 55 and driven a distance of 110 feet to cut the lower reaches of a stringer vein found on the Lower 400. At 25 feet the vein was cut and has produced some ore of fair grade. 230 feet of drifting was done on the vein, but as both the east and west headings have gone into waste, drifting has been stopped until the vein can better be developed by a raise to the Lower 500 and Lower 400.

During 1947 it is proposed to drive the Lower 500 level from Raise No. 38 at the same elevation as the Northwest Vein level.

For the year 1946 no active reserve will be shown on this stringer, due to inability to correlate the Lower 400 with the Lower 650 until Raise No. 38 has broken through. It is planned to push this work in 1947.

Lower 650 Jucuara No. 1

This drift and crosscut, known as No. 28, was driven a total of 490 feet during 1946 to get under a high grade block of ore on the Lower 500 level. So far this work has been a disappointment as the vein has been so badly faulted that it has been impossible to follow it definitely. It is proposed to drive a short crosscut north under Raise No. 9 on the Lower 500 to see if

the vein has been missed by following the fault. If the vein is not found in this crosscut, raising will be in order from the Lower 650 to locate the bottom of the ore body.

Lower 650 Jucuara No. 2

Crosscut No. 29 was started in Block 91 and drives north to cut the ore body found on the Lower 500 and mentioned under Crosscut No. 50. This was advanced a total of 190 feet. At 80 feet an extremely large fault was found, dipping 51° south which has the opposite dip of any of the other faults found in this section. The vein was not found where it was projected and it is now believed to be sitting just above the Lower 650 on this fault. A raise has been started, in line with Raise No. 36 on the Lower 500 level, with the object of definitely locating the bottom of this ore. It is proposed to do additional work on the Lower 650 and Lower 750 to determine whether or not a continuation of the vein exists below the fault.

Lower 1150 Rosario

Late in the year it was decided to start a long exploration crosscut at depth some 500 feet below the present Lower 650 motor haulage level, as no exploration at depth has ever been undertaken.

This crosscut was started in Block Minus 6 to cut the Rosario vein in Block 5. During the year preparations were completed and an advance of 100 feet was made.

This crosscut will be given preference over all other exploration work. Except for unforeseen difficulties the Rosario vein should be reached before the end of the year.

Additional Crosscuts

An additional 9,108 feet were driven during the year in connection with the regular mining operations, but are not specifically mentioned above.

Vein Development & Stoping

Of the total of 202,225 tons of ore sent to the mill during 1946, the greater part, or approximately 81%, came from the following veins: San Miguel, Colonia, Culebra No. 1, Culebra No. 2, Culebra Stringer, Termopilas, Jucuara No. 1, Jucuara No. 2, Jucuara No. 3, Jucuara No. 4, Jucuara No. 9, Salvador, San Benito No. 1, Santa Fe No. 1, Santa Gertrudis No. 1, Southwest No. 1, Southwest No. 7, Northwest and Veta 4 South. Old Fill supplied 7½%. The remaining tonnage of 11½% was made up from the following veins: Crisanta No. 1, Jucuara No. 6, Jucuara No. 7, Jucuara No. 8, Jucuara No. 10, Southwest No. 2, Southwest No. 4, Southwest No. 10, Southwest No. 12, San Blas No. 1, 56 Fault Vein, Independencia, Nueva, Carmen No. 2, Ro-

sario Stringer No. 1, Rosario Stringer No. 2, Fortuna, San Vicente, Veta 4 North, Buena Ventura, Jucuara No. 5, Santa Fe No. 2, Catalina No. 2, Candelaria and San Blas No. 2. Veins worked during the year numbered 44.

Salvador Group

Salvador Vein

This was again the second largest producer of the year with 22,989 tons extracted, of which 2,042 came from development. Beginning the year, efforts will be made to find some additional branches which may prolong still further its long life. 34,268 tons of 14 oz. silver and .03 oz. gold per ton remain.

Carmen No. 2

During the latter part of the year it was possible to take advantage of the high silver price to extract 563 tons of ore from this vein, on which there had been no previous stoping because of mining grade at former silver prices.

Jucuara No. 1 (Fortuna)

This vein, from which 34,462 tons were mined, was again the largest single producer for the year. Of the total mined, 96% came from stopes, 91,820 tons of 18 oz. silver and .05 oz. gold per ton remain. Some additional reserves can be expected, as active development is being continued on its branches and extensions. It is proposed to mine as much of the lower grade blocks as possible during 1947.

Fortuna North

The Fortuna North was mined for the first time in several years and produced 1,695 tons, all from stopes. A new level will be driven on the Upper 500, but no great amount of additional ore can be expected. This vein, soft and blocky, is subject to a high percentage of dilution and requires a high silver price to justify mining it.

Independencia Group

Independencia Vein

This vein was worked again after the increase in the price of silver, producing 647 tons, and has allowed the blocking out in Annex "A" of 2,895 tons of 11 oz. silver, .07 oz. gold. A conservative production program will permit mining this ore and existing fills with silver above 70 cents.

San Blas No. 1 Vein

Some development was done on the Upper 150 the latter part of the year to make available a small tonnage listed in Annex "A". 378 tons was produced, all from development.

San Blas No. 2 Vein

Along with the policy followed, with the rise in silver, of mining all possible ore that was not on Active Reserves, it was possible to mine 1,269 tons, exclusive of the Active Reserves. It is planned to draw more tonnage from this vein in 1947.

Jucuara Group

Jucuara No. 2 Vein

Of the 4,655 tons credited for 1946, 2,030 tons came from development, mostly of ore developed on a branch vein mentioned under Crosscut No. 50. Lower 500 reserves will be shown as on the 56 Fault Vein.

The No. 6 Shaft mentioned in last year's report was finished to the Lower 850 level during the last quarter of 1947. A crosscut was driven to cut the vein at the same time that the sump and pumping station were being cut.

The vein where intersected carries some promising prospects, but until an electric pump and accessories can be put into operation on this level, active development will have to wait. This should be concluded by February 15th, when active development will begin on both the Lower 750 and Lower 850 levels. An addition to the reserves can be expected for 1947.

Jucuara No. 3 Vein

Production yielded 4,212 tons for the year, mostly from stopes. Stoping was suspended late in the year as efforts were made to increase the tonnage from lower grade veins. Its ore reserves are divided into Active and Inactive.

Jucuara No. 4

Stoping and development were continued on an active scale throughout the year, giving a production of 10,310 tons, of which stoping accounted for 8,988.

During stoping operations a stringer vein was found, which will be known as Jucuara 4 South Branch. Active reserves will extend from the Zero level to the Lower 400.

Jucuara No. 5 Vein

Stoping on a small scale was carried out to mine a small block of low grade ore carried on the reserves.

Jucuara No. 6 Vein

Even though no active reserve was carried on this vein, a production of 2,391 tons of ore was extracted from stopes. No reserve is carried for 1947.

Jucuara No. 9 Vein

This low grade vein was actively worked during the year, being the fourth largest producer. Of the 12,239 tons mined 11,983 came from stoping operations. It is proposed to draw as heavily as possible from this vein in 1947. There remain 8,147 tons of 8 oz. silver and .04 oz. gold.

Jucuara No. 10 Vein

This vein produced 2,367 tons during the year and is practically depleted, leaving no reserve for 1947. Further development is proposed on the Lower 200, and it is hoped additional ore will be found in its upper reaches.

Jucuara No. 12 Vein

Jucuara No. 12 has been undergoing development for several years, but its former grade prohibited placing it on the reserves. It is now included in Annex "A" and shows 2,967 tons of 11 oz. silver and .07 oz. gold.

Jucuara No. 13 Vein

This vein has been partially developed on different levels for several years, but had never had sufficient work done on it to correlate one level with another. During the year sufficient raises were driven to permit the blocking out of a small active reserve for 1947. Silver price permitting, it will be stoped this year.

56 Fault Vein

Eliminated from Active Reserves in 1938 this vein is now again included, showing 7,452 tons of new ore of 12 oz. silver and .09 oz. gold as result of new developments as explained under Lower 500 Crosscut No. 50.

Santa Fe Group

Santa Fe Main Vein

This old vein, which has not been worked for years, is again included, partly in Annex "A" and partly in Annex "B". A larger tonnage than indicated is expected if the price of silver remains favorable. A good tonnage of old fills could be drawn from this section.

Santa Fe No. 1 Vein

This vein was not worked during the year 1946 and the production of 4,542 tons was taken from broken ore in stopes.

Santa Fe No. 2 Vein

In value the largest individual vein reserve appears on this vein, but not mined during the year. The small 1946 tonnage

of 958 was taken from previously broken ore. It is not planned to mine this during 1947.

Santa Fe No. 3, San Benito No. 2 and

San Benito 1 Branch 1 Veins

All of the above remain the same as last year with the exception of the San Benito 1 Branch 1, included in San Benito 1, Annex "A". The San Benito Branch 1 Vein is the only one of this group that will be worked during the year if present plans can be carried out.

San Benito No. 1 Vein

4,419 tons were mined, all from stopes. The same rate of mining is planned for 1947.

Old Mine Group

Of the Old Mine Group, none of the following veins were mined during 1946: Capitana No. 1, Capitana No. 2, Colonia No. 2, Crisanta No. 2, Esperanza, Guadalupe, Porvenir, Rosario No. 2, Southwest No. 3, Southwest No. 5 and San Joaquin. There are small changes in the reserves as shown in Annexes "A" and "B".

Catalina No. 2 Vein

This vein was stoped on a small scale above the Upper 450 level, but produced only 436 tons. It is not proposed to stope it from the Upper 150 to the Upper 450 level until the remaining ore left in the upper levels of the South San Miguel are depleted as the raises through these levels serve as ore passes to the motor haulage level.

Colonia No. 1 Vein

During the year 9,330 tons were mined, 8,561 coming from stopes. It had not been planned to do any stoping on the better grade blocks during the year, but to meet the production requirements, it was found necessary to take two of the better grade blocks during the second and third quarters.

Considerable development was done on the Lower 400 level during the latter part of the year, allowing an addition to the reserves. There remain 69,477 tons of 12 oz. silver and .15 oz. gold on the Active Reserves, and a small tonnage of Inactive.

Crisanta No. 1 Vein

This low grade vein was actively mined during the latter part of the year. 1,341 tons were delivered to the mill, but the greater part mined remains as broken reserves. This will all be delivered to the mill during the first quarter of 1947.

It is planned to connect the Crisanta No. 1 vein with the Crisanta No. 2 on the Upper 350 level. There is a good possibility of increasing the low grade reserve on this level.

Culebra No. 1 Vein

The vein was worked to the extent of 6,143 tons, all from stopes. Considerable development is planned during 1947 on the Zero and Lower 200 levels, while stoping as much from reserves as the grade will permit.

Culebra No. 2 Vein

6,571 tons of comparatively low grade ore was mined from this vein during the year, taking advantage of the high silver price. Active stoping and development will be continued.

Culebra Stringer Vein

This vein proved to be one of the best sources of new ore during 1946, and it was actively developed on the Upper 150, Upper 250, Upper 350, Upper 500 and Upper 600, producing 13,943 tons of ore, making it the third largest producer. 5,428 tons came from development. Development possibilities are now limited as the vein has joined the Rosario on all levels above the Upper 150. Stoping is planned on about the same scale as last year. A reserve of 35,698 tons of 13 oz. silver and .04 oz. gold remain.

Northwest and Northwest Branch Vein

Considerable development was done on the Lower 400 and Lower 650 levels of the Northwest Branch, but as we cannot yet correlate the Lower 400 with the Lower 650 until some exploratory raises are through, no attempt will be made to block out this lower level. Further development is planned by drifting on the Lower 500 level and connecting all levels with raises. Tons extracted in 1946 were 5,205, of which, 3,645 came from stopes.

Southwest No. 7 Vein

A tonnage of 3,019 was extracted from this vein, leaving no known reserves. There remains very little chance of finding additional ore in this area. Both lateral and vertical limits have been reached.

Southwest No. 10 Vein

Active mining depleted all the ore on this vein during 1946. There remains no possibility of new ore.

Rosario Stringer No. 2 Vein

The production of 2,547 tons depleted all reserve ore on this vein. There remain some fairly good values in the floor of the

Lower 300 level, but as that is not accessible and cannot be made so easily, it is not included on the reserves at this time.

It is proposed actively to develop the Northwest Vein on the Lower 400, in Block 49, east of the old No. 49 waste pass. This territory presents a good field for developing a fair tonnage of low grade ore on the Northwest, Buena Ventura and Rosario, provided any one of these veins should continue east to Block 40. The above ore on the Rosario Stringer would then be made available.

South San Miguel Vein

Stoping on a small scale was continued during the year, 2,484 tons being produced, all from stopes. Mining will continue at about the same rate until all ore is depleted.

Other Veins

Veta 4 South Vein

Mining on this vein in 1946 consisted mostly of development, delayed for several years due to the grade of ore to be developed and scarcity of materials. 1,543 feet of development was confined principally to the Upper 150, Upper 250, Zero, and Lower 200 levels. This year it is planned to develop it to its lateral limits on each level. It is also planned to cut the vein on the Lower 400 as mentioned under Crosscut No. 123 of Lower 400.

Production amounted to 2,960 tons from stoping and 2,801 tons from development. If present mining plans can be carried out this vein should be one of the best producers in 1947. There remain 38,261 tons of 18 oz. silver and .02 oz. gold on the Active Reserves, an addition of 16,032 tons for the year.

Veta 4 North Vein

Development of this vein has continued in conjunction with the work on the Veta 4 South on the Upper 250 and Upper 150, and will be continued on the Zero and Lower 200.

Development resulted in a gain of 4,028 tons to the reserves.

Santa Gertrudis No. 1 Vein

Intensive mining of this vein during the year resulted in depleting all reserves on Annex "A", leaving only a small block carried under Annex "B" and mentioned under Zero Santa Gertrudis Crosscut No. 24.

Southwest No. 1 Vein

This vein, not carried on reserves last year, produced 5,844 tons of fair grade ore, 1,500 from development.

Development on the Zero, Lower 200, Lower 300, and Lower 400 shows 1,100 feet and resulted in the blocking out of 4,265 tons of new ore of 15 oz. silver and .04 oz. gold.

Further development can hardly be expected to add to the existing reserves

The following veins, not specifically mentioned above, produced a total of 6,595 tons. Termopilas, Southwest No. 2, Southwest No. 4, Jucuara No. 7, Jucuara No. 8, Rosario Stringer No. 1, San Vicente, Buena Ventura and Candelaria. Some of the above veins will be actively worked in 1947, conditions permitting the continued use of low grade ore.

Old Fills

Commencing in August a program was initiated to recover all the available fills possible that would average from $6.00 up and at the same time keep the mill head at an average of 12 oz. silver and .05 oz. gold for the last six months of the year. Under this program it was possible to obtain the following tonnage: August, 1,334; September, 2,573; October 3,320; November, 3,828, and December, 3,323, or a total of 14,378 tons for the last five months of the year.

The following veins supplied the greater part of this ore:

Rosario Stringer No. 1 vein	2,623	tons
Candelaria	1,295	"
Colonia	602	"
Salvador	1,955	"
Independencia	497	"
Santa Fe Main	427	"
Guadalupe	796	"
Culebra No. 1	855	"
Buena Ventura	2,309	"
San Benito No. 1	323	"
Northwest	365	"
Total	12,047	"
Miscellaneous veins produced	3,164	"

Conditions permitting, it is planned to continue this program and derive as much as 25% of our tonnage from Old Fill, low grade development and ore under Annex "B".

The average grade of ore has again dropped, .86 oz. silver and .0043 gold, notwithstanding the fact that during the last four months of the year a very low mill head was maintained.

Ore Production (Delivered to the Mill)

	1943	1944	1945	1946
From Stopes (tons)	155,712	167,263	167,970	178,873 (incl. Fills)
From Development (tons)	21,497	20,390	25,096	23,352
Total	177,209	187,653	193,066	202,225

General Mine Comments

No new ore bearing zones were discovered during the year, but continued studies and intensive development of branch veins were helpful in maintaining a fair average of reserves.

The possibility of the existence of displaced vein sections in the extensive ground above the upper known limits of certain veins, particularly in the Santa Fe and San Benito sections, is to be explored by diamond drilling. The result of such work, to be commenced during the first half of the year, will determine the advisability of future exploration in that section.

It is also planned to explore, by drilling, the territory above the Jucuara No. 2 Vein and the rather extensive area lying south of it and west of the Southwest fault which terminates most of the known strong veins of the Salvador Group on the west end.

Existence of ore at depth on the Jucuara 2 vein, at least to the lower 850, has already been proved. This suggests the advisability of still deeper exploration in that and other sections. The veins that present the best prospects for ore occurrence at depth are the Santa Fe veins and the Rosario. Although it is an established fact that silver values on all known veins decrease rapidly before reaching the Lower 650 haulage level, gold values persist, but too low to mine for gold only. Lead and zinc occurrence becomes more noticeable with depth and it is not impossible that minable base minerals, combined with gold, can be found deeper than the existing work.

The drilling program is to be combined with a geological study which it is hoped to start by July 1st, 1947.

The Mill

Necessary changes and additions to the equipment are constantly being made. A record tonnage (202,200) was milled in 1946.

General Comments On Rosario Property

A minimum silver price of 70 cents an ounce, if maintained throughout the year, will justify the continued mining of low grade ore.

There is an appreciable tendency towards normal shipping facilities which will be helpful to operations.

Our policy of selling high cost local foodstuffs to our employees at below market price will be continued throughout this year at least.

New Properties

El Mochito Mine (Honduras)

Due to the protracted delays in the delivery of equipment and supplies, the operation of this property must be deferred until the end of this year, or early in 1948. Some essential electrical supplies will not be available until October.

With the arrival of a diamond drill early this year it is planned to explore the main body at depth. The present bottom level, the 275-foot one, shows considerable improvement over the level above. It is planned to sink the 400-foot level before the mill is ready for production.

Ore reserves total 100,000 tons of 40.00 ounces silver and .03 ounces gold. An additional 10,000 tons of 15.00 ounce silver ore can be reasonably expected from smaller deposits so far developed.

El Dorado (El Salvador)

Development is responding favorably, and 85,000 tons of .28 gold ore are reasonably assured on two veins thus far only partially developed to the 175 foot shaft level.

There are many veins within the Company's holdings still subject to development, and a larger tonnage operation than originally planned is reasonably assured. The mill is designed to handle 150 tons per day.

Construction work is progressing favorably, and if the mill and power equipment is delivered as anticipated, it will be possible to put the property into production about the end of this year.

Yuscaran Mines (Honduras)

An active development, exploration and old workings recovery program has been carried on during the year, although work has been impeded to a considerable extent because of the delay in securing needed equipment. In all probability it will require this entire year to complete the exploration of this property, including a geological study, and will require an outlay of at least $75,000.00.

El Tránsito (Honduras)

Work upon this property has been impeded, owing to inability to secure needed equipment. It is hoped that its further exploration may proceed with diligence during 1947, and the possibilities of the property more definitely determined within that period

Aguacate District (Costa Rica)

Options on two of these properties expire early this year, and on the third, in November 1947. Upon the completion of the work now in progress a determination will be made as to the continuance of the Company's interest in these properties.

Company Staff

Difficulty is still being experienced in rebuilding an adequate staff, but the situation is better than a year ago. The operations on new properties has increased the work falling on the local Rosario staff, but every department has met its added responsibilities in a gratifying spirit.

Respectfully submitted,

K. H. MATHESON,
General Manager.

OPERATIONAL STATISTICS

	Year 1946		Year 1945	
Number of Men employed per working day	1,118		1,132	
Tons of Ore Mined	216,538		187,165	
Tonnage Mined from October 1, 1907 to December 31, 1946:				
From Stoping	3,806,497		3,642,835	
From Development	744,693		721,321	
From Fills	254,821		239,610	
	4,806,011		4,603,786	
Power Statistics				
Rainfall	37.66 in.		52.38 in.	
Power Sources	*Kilowatt Hrs.*	*%*	*Kilowatt Hrs.*	*%*
San Juancito Plant	5,305,150	51.48	5,287,310	53.31
Guadalupe Plant	3,174,810	30.81	3,564,280	35.94
Aguacatal Plant	844,600	8.20	269,300	2.72
Diesel Plant	980,200	9.51	796,000	8.03
	10,304,760	100.00	9,916,890	100.00
		Per K.W.H.		*Per K.W.H.*
Hydro power-cost of	$21,944.00	.0023534	$21,103.00	.002313
Diesel power-cost of	22,240.00	.0226895	16,747.00	.021038
Total	$44,184.00	.0042878	$37,850.00	.003817
Assay Office and Laboratory				
Total cost	$14,747.80		$13,982.28	
Assays run — number	57,861		52,207	
Cost per assay	$ .25		.27	
Educational (Schools)	$13,773.35		$12,487.67	
Medical Department				
Maintenance	$ 8,444.97		$ 9,260.52	
Cases Handled	14,898		10,665	
Miscellaneous				
Police and Watchman	$16,067.64		$16,307.83	
Mine Hotel	$13,986.30		$10,733.04	
Care of Roads	$ 5,376.21		$ 7,657.35	
Agencies	$ 5,628.85		$ 4,097.34	

ANNEX "A"—ACTIVE ORE RESERVES FOR 1946

Estimated Reserves (13 & 14 cu. ft. per ton)	Average Width Feet Vein	Waste	Stope	Tons Ore & Waste	Av. Troy Ozs. Per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Independencia Group								
Independencia	2.75	1.25	4.00	2,895	11	.07	30,943	216
San Blas—1	1.48	2.02	3.50	1,286	13	.02	16,742	30
San Blas—2	0.95	1.80	2.75	16,247	10	.07	159,190	1,166
Salvador Group								
Fortuna North	2.24	1.26	3.50	2,337	13	.02	30,807	40
Jucuara—1 (Fortuna)	2.28	1.59	3.87	91,820	18	.05	1,675,523	4,590
Salvador	1.48	1.80	3.28	34,268	14	.03	474,671	1,077
Jucuara Group								
Jucuara—2	3.06	1.87	4.93	16,549	15	.11	243,721	1,624
Jucuara—3	1.76	1.91	3.67	7,906	10	.15	77,027	1,195
Jucuara—4	1.60	1.90	3.50	26,409	19	.07	504,448	1,670
Jucuara—7	1.19	1.81	3.00	1,652	9	.07	14,349	112
Jucuara—8	1.95	2.05	4.00	1,143	18	.04	21,055	50
Jucuara—9	1.94	1.56	3.50	8,147	8	.04	62,639	310
Jucuara—12	1.23	1.77	3.00	2,967	11	.07	31,376	203
Jucuara—13	1.20	2.30	3.50	1,735	17	.08	29,155	131
56 Fault Vein	2.58	1.42	4.00	7,452	12	.09	86,813	706
Santa Fe Group								
Santa Fe Main	3.16	1.34	4.50	3,695	13	.07	46,560	245
Santa Fe—1	2.27	1.41	3.68	6,787	13	.18	89,354	1,211
Santa Fe—2	2.44	2.51	4.95	46,465	45	.44	2,065,047	20,489
Santa Fe—3	2.35	1.65	4.00	6,230	32	.36	201,688	2,246
San Benito—1	1.28	1.72	3.00	10,815	13	.13	135,625	1,400
San Benito—2	1.76	1.30	3.06	34,979	20	.24	709,059	8,291
Old Mine Group								
Candelaria Main	1.81	1.69	3.50	1,158	8	.06	8,087	70
Capitana—1	0.82	2.18	3.00	6,102	5	.16	27,746	949
Capitana—2	1.14	1.36	2.50	3,806	5	.10	20,197	386
Catalina—2	1.34	1.66	3.00	9,018	16	.02	146,968	165
Colonia—1	1.36	2.05	3.41	69,477	12	.15	869,027	10,155
Colonia—2	1.27	1.73	3.00	5,788	8	.08	48,258	450
Crisanta—1	1.18	1.42	2.60	6,247	10	.02	62,329	123
Crisanta—2	0.68	2.32	3.00	5,313	11	.02	58,882	127
Culebra—1	1.62	1.38	3.00	8,932	16	.03	142,496	270
Culebra—2	1.65	1.41	3.06	18,342	14	.04	254,497	815
Culebra Stringer	1.63	1.72	3.35	35,698	13	.04	449,095	1,354
Esperanza	0.89	2.11	3.00	8,267	11	.03	87,858	235
Guadalupe	1.86	1.14	3.00	2,727	12	.09	33,415	255
North West	1.33	1.67	3.00	5,545	10	.11	55,987	628
Nueva	0.89	2.11	3.00	6,646	9	.11	59,065	741
Porvenir	1.23	1.77	3.00	6,706	8	.02	56,656	140
Rosario—1	2.31	1.86	4.17	7,357	27	.10	200,096	764
Rosario Stringer—1	1.07	2.18	3.25	7,746	11	.05	87,842	411
Rosario—2	2.06	0.94	3.00	5,560	8	.10	43,720	570
San Joaquin	1.24	1.76	3.00	3,538	19	.28	68,717	987
South San Miguel	1.81	1.32	3.13	8,286	16	.08	131,820	648
South West—1	1.84	2.41	4.25	4,265	15	.04	65,956	175
South West—3	1.44	3.06	4.50	3,920	20	.04	78,203	142
South West—5	1.91	2.09	4.00	4,526	14	.03	65,307	143
Termopilas	1.19	1.81	3.00	591	9	.05	5,054	30
West	1.84	1.66	3.50	1,562	9	.17	14,576	266
Other Veins								
Santa Gertrudis—2	1.73	1.27	3.00	3,622	11	.03	40,093	106
Veta—4 North	1.84	1.49	3.33	12,604	10	.02	131,459	299
Veta—4 South	1.41	1.59	3.00	38,261	18	.02	688,081	1,003
				633,394	16.90	.1096	10,707,279	69,409

Broken Ore in Stopes (21 cu. ft. per ton)

Candelaria	499
Catalina	1,169
Colonia	9,226
Crisanta	3,339
FORWARD	14,233

Estimated Reserves (13 & 14 cu. ft. per ton)	Average Width Feet Vein	Waste	Slope	Tons Ore & Waste	Av. Troy Ozs. Per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
FORWARD				633,394	16.90	.1096	10,707,279	69,409
				14,233				
Culebra—1				2,782				
Culebra Stringer				3,270				
Fortuna				1,858				
Jucuara—1				9,623				
North West				1,601				
Salvador				8,142				
San Blas—2				105				
San Benito—1				4,080				
Santa Fe—1				1,186				
Santa Fe—2				1,715				
Termopilas				127				
Veta—4 North				927				
Veta—4 South				3,612				
Mine Storage Chutes				516				
Mill Ore Bin				520				
				54,297	13.84	.0852	751,531	4,627
TOTAL				687,691	16.66	.1077	11,458,810	74,036

ANNEX "B"

INACTIVE ORE RESERVES

Estimated Reserves at 13 *cu. ft. per ton*

	Average Width Feet Vein	Waste	Stope	Tons Ore & Waste	Av. Troy Ozs. Per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Candelaria Main	1.38	1.79	3.17	5,097	6	.08	31,184	102
Candelaria Branch—1	1.07	1.93	3.00	4,636	6	.07	26,997	319
Colonia—1	0.45	2.55	3.00	4,096	7	.05	27,016	203
Culebra Stringer	1.52	1.73	3.25	8,948	7	.02	63,334	166
Jucuara—3	1.36	1.64	3.00	4,024	3	.10	13,410	413
North San Miguel	1.60	1.90	3.50	1,831	12	.05	22,134	95
Nueva	0.89	2.11	3.00	4,269	9	.09	37,746	374
San Benito—1	1.24	1.76	3.00	1,530	11	.06	16,182	89
Santa Fe Main	2.78	1.72	4.50	4,225	7	.02	31,184	102
Santa Fe—2	2.33	1.67	4.00	5,198	6	.05	29,548	284
San Joaquin	1.02	1.98	3.00	3,019	12	.10	37,232	298
Santa Gertrudis—1	1.32	2.18	3.50	1,562	11	.02	16,963	32
TOTAL				48,435	7.27	.0575	352,189	2,785

Note on Reserves:

While it is inherently probable that the tonnages and grades when actually mined from these individual veins, will vary somewhat from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

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MARVYN SCUDDER
CORPORATION FILES

NEW YORK AND HONDURAS ROSARIO MINING COMPANY



SIXTY-SEVENTH ANNUAL REPORT

NINETEEN HUNDRED AND FORTY-SEVEN

REPORT of the
NEW YORK and HONDURAS
ROSARIO MINING COMPANY

NEW YORK

JANUARY 1, 1948

NEW YORK AND HONDURAS ROSARIO MINING COMPANY

OFFICERS

April 2, 1947 to April 7, 1948

WM. A. PRENDERGAST, *President*
LEWIS L. CLARKE, *Chairman of Board* W. C. LANGLEY, *Treasurer*
RICHARD F. GOODWIN, *Vice-President* J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

April 2, 1947 to April 7, 1948

LEWIS L. CLARKE, *Chairman*

JULIAN B. BEATY	W. C. LANGLEY
RICHARD F. GOODWIN	LESTER S. OPPENHEIMER
DR. J. RALPH JACOBY	WM. A. PRENDERGAST
HERBERT A. KAUFMANN	M. F. SOTO

RICHARD H. VALENTINE

EXECUTIVE COMMITEE

April 2, 1947 to April 7, 1948

LEWIS L. CLARKE, *Chairman*	R. F. GOODWIN
JULIAN B. BEATY	DR. J. RALPH JACOBY
M. F. SOTO	RICHARD H. VALENTINE

WM. A. PRENDERGAST, W. C. LANGLEY } *Ex-Officio*

PRESIDENT'S REPORT

JANUARY 1, 1948

To the Stockholders of the
New York and Honduras Rosario Mining Company:

Judged by all reasonable standards, the Company's year of 1947 was a satisfactory one. In the preparation for more extended activities commencing the early part of 1948, its efforts covered a larger field than in any prior year of its sixty-seven years existence. It is a great pleasure to restate the fact of our continued happy relations with the Government of Honduras, and through this report to convey to President Tiburcio Carias A., and the people of that Republic, our grateful felicitations.

General Manager's Report (Pages 13 to 26):

As stockholders, you are most respectfully urged to consider the General Manager's Report, which gives you with particularity the condition of the Rosario property. Especially important is the state of the "Reserves" upon which special comment was made in our last Annual Report, and to which there will be further reference in this Report.

Earnings for 1947:

There is a marked reduction in the earnings for the period mentioned from those of the preceding year, a fact to which your attention was directed in our interim report of July 31, 1947. The difference is due to the following causes:

(1) The grade of silver ore used was lower by 1.3063 ozs. per ton than the grade of 1946, and this, with other conditions, resulted in a reduced production of silver of 279,411 ozs. *The grade used was the highest that it was wise to employ with due regard to the general value of the reserves, and the prolongation of the life of the property.* The policy as to the grade to be used in 1948 will be determined during the early part of that year.

(2) It would seem hardly necessary to call attention to the increased costs in respect to wages, salaries, supplies and equipment, as they are of common knowledge, and they have had, as shown in the Income and Surplus Statement (Page No. 7), an appreciable effect upon earnings.

(3) The market price for silver was decidedly variable for the greater part of 1947, but displayed gratifying stability from the latter part of October to the end of the year. However, the price never attained the high level of 1946. The average price we obtained during the last year mentioned was $.89231 per oz., and during 1947, $.702521, an adverse difference of $.189789. This difference in price alone, as applied to the production of 1947, and as distinguished from causes Numbers (1) and (2), would account for a difference in income of $456,160.19.

Other Properties:

It is not necessary to supplement, except in certain particulars, what is said in the General Manager's Report regarding the properties in which we have become interested in the last five years, but to summarize the expenditures we have made thereon, and their effect upon the financial status of the Company.

The options on the Costa Rican properties, and a small property known as Liquidambal, adjoining Yuscarán, were relinquished during the year. It is believed that the El Tránsito and Yuscarán properties are susceptible to a limited operation from which a portion, or possibly all, of our investment in them may be recovered.

In our report for the year 1944, we explained that the American Smelting and Refining Company had a 65% interest in the El Tránsito property. The property was acquired in the name of the New York and Honduras Rosario Mining Company. The American Smelting and Refining Company has withdrawn from all connection with this enterprise, and any further operation of it will be for our account exclusively. The American Smelting and Refining Company has defrayed, up to this time, 65% of all the expenditures upon the property.

It is hoped that the El Dorado and El Mochito properties will be in operation during the early part of 1948.

The following statement gives the expenditures we have made since 1944 upon all the properties mentioned above:

	Capital Costs	Other Assets	TOTAL
El Mochito (Honduras)	$1,014,021.24	$154,799.84	$1,168,821.08
New York and El Salvador Mining Company, Inc., (El Dorado) (El Salvador)..	614,220.73	197,460.17	811,680.90
The Mines of Yuscarán (Honduras)	221,173.95		221,173.95
El Tránsito (Honduras)	58,021.68		58,021.68
Aguacate District (Costa Rica)	132,800.64		132,800.64
Liquidambal (Honduras)	13,642.75		13,642.75
	$2,053,880.99	$352,260.01	$2,406,141.00

The foregoing expenditures of $2,406,141.00 have been financed by the sale of securities and accumulated earnings. Our investment portfolio was started principally for the purpose of providing for investments in *Mining Properties*, and the income therefrom has been a material help to our earnings for the last twenty-seven years. While the balance sheet shows a diminution in cash resources, the property account is enhanced.

Honduras Income Tax:

In the Annual Reports of the years 1945 and 1946, your attention was called to the fact that the Federal Income Tax Bureau had disallowed our deduction of the Income Tax paid to the Honduras Government as a credit against the Income Taxes paid to the Government of the United States of America. The Tax Court of the United States decided against us, but held that such payments were privilege taxes deductible as a business expense. We have appealed the case to the United States Circuit Court of Appeals. While the case before the Courts affects only the years 1941 and 1942, the same state of facts applies to subsequent years.

Neptune Gold Mining Company:

During the year 1947 the Administrator of a mining company which held Debentures and Capital Stock offered them for sale and we acquired 30% of the offering, or $14,256.69 principal of Debentures, and 510 shares of capital stock, making our holdings as of December 31, 1947, $156,823.58 principal amount of Debentures, and 5610 shares of capital stock.

The Annual Report of Neptune Gold Mining Company is included in this pamphlet. (Pages Nos. 27 to 30).

Respectfully submitted,

WM. A. PRENDERGAST,
President.

General Operating and Financial Statistics
Years ended December 31, 1947 and December 31, 1946

	1947	1946	Increase Decrease*
Number of men employed per working day	1,112	1,118	6 *
Tons of ore mined	186,229	216,538	30,309 *
Tons of ore milled	199,900	202,200	2,300 *
Average tons milled per day, full running time	575	578	3 *
Ounces of silver recovered	2,403,499.63	2,682,910.32	279,410.69 *
Number of ounces of silver recovered per ton of ore	12.90615	13.26860	.36245 *
Silver recovered—percentage	90.534249	90.962454	.428205*
Sales value of silver recovered	$1,688,509.36	$2,393,989.50	$ 705,480.14 *
Average sales value of silver per ounce	$ .70252	$ .89231	$ .18979 *
Average cost of silver per ounce**	$ .45786	$ .35896	$ .09890
Average profit on silver per ounce**	$ .24466	$ .53335	$ .28869 *
Average sales value of silver recovered per ton of ore	$ 8.44677	$ 11.83971	$ 3.39294 *
Average cost of silver per ton of ore**	$ 5.50508	$ 4.76294	$ .74214
Average profit on silver recovered per ton of ore**	$ 2.94169	$ 7.07677	$ 4.13508 *
Ounces of gold recovered	11,928.780	12,093.584	164.804 *
Number of ounces of gold recovered per ton of ore	.05967	.05981	.00014 *
Gold recovered—perentage	94.5591	95.2786	.7195 *
Sales value of gold recovered	$ 479,690.24	$ 432,881.14	$ 46,809.10
Average sales value of gold per ounce	$ 40.21	$ 35.79	$ 4.42
Value of gold recovered per ton of ore	$ 2.39965	$ 2.14086	$ .25879
Ratio of gold to silver	1 :201	1 :222	:021 *
Earnings (A)	$ 516,897.29	$1,054,146.16	$ 537,248.87 *
Per share (A)	$ 2.79	$ 5.67	$ 2.88 *
Dividends paid	$ 371,264.00	$ 826,062.40	$ 454,798.40 *
Per share	$ 2.00	$ 4.45	$ 2.45 *
Reservations	$ —0—	$ 40,000.00	$ 40,000.00 *
Accretions to surplus	$ 158,058.18	$ 188,083.76	$ 30,025.58 *
Income from investments	$ 102,499.86	$ 90,723.33	$ 11,776.63
Marketable securities owned as at December 31st			
Cost	$ 620,176.33	$1,905,516.21	$1,285,339.88 *
Market	$ 663,730.00	$2,036,230.89	$1,372,500.89 *
Difference between Cost and Market	Plus 7-02/100%	Plus 6-86/100%	16/100%

The Bullion Production from the organization of the Company to December 31, 1947, amounts to $78,780,044 and the dividends paid therefrom were $19,499.065.

(A) Before deducting loss from abandonment of mining properties $146,443.39 less $55,648.99 tax saving therefrom.

** After credit for sales value of gold recovered.

Income and Surplus Statement

For the Years Ended December 31, 1947 and December 31, 1946

	Year		Increase
	1947	1946	Decrease*
Production of gold and silver	$2,168,200.	$2,826,871.	$658,671.*
Less freight and other expense on bullion	100,885.	96,006.	4,879.
OPERATING INCOME	$2,067,315.	$2,730,865.	$663,550.*
Operating expenses	1,345,518.	1,179,262.	166,256.
MINE OPERATING PROFIT	$ 721,797.	$1,551,603.	$829,806.*
New York administrative and general expenses	133,752.	120,680.	13,072.
NET OPERATING PROFIT	$ 588,045.	$1,430,923.	$842,878.*
Add income from investments, etc.	102,500.	90,724.	11,776.
	$ 690,545.	$1,521,647.	$831,102.*
Less other deductions from income:			
Interest	15,994.	615.	15,379.
State and city taxes	2,863.	2,416.	447.
Sundry	3,343.	3,562.	219.*
	$ 668,345.	$1,515,054.	$846,709.*
Taxes on income—estimated			
Federal income tax	72,500.	388,000.	315,500.*
Government of Honduras, C.A.	23,299.	72,908.	49,609.*
Equivalent of Federal income tax saving resulting from abandoned mining properties during year (as below)	55,649.	—0—	55,649.
	$ 151,448.	$ 460,908.	$309,460.*
NET PROFIT BEFORE ABANDONMENT OF MINING PROPERTIES	$ 516,897.	$1,054,146.	$537,249.*
Loss from abandonment of mining properties during year, $146,443, less tax saving, $55,649, therefrom (as above)	90,794.	—0—	90,794.
NET PROFIT FOR YEAR (Note A)	$ 426,103.	$1,054,146.	$628,043.*
Add or (deduct):			
Reserves set aside in prior year for costs absorbed in 1947:			
Special expansion projects	85,000.	—0—	85,000.
Wage adjustments	40,000.	(40,000.)	80,000.
Balance transferred to earned surplus for year	$ 551,103.	$1,014,146.	$463,043.*
Dividends paid or provided for, totaling $2.00 per share in 1947 and $4.45 per share in 1946	371,264.	826,062.	454,798.*
Addition to Reserve for Taxes	21,780.	—0—	21,780.
	$ 158,059.	$ 188,084.	$ 30,025.*
Earned surplus—beginning of year	2,449,621.	2,261,537.	188,084.
Earned surplus—end of year	$2,607,680.	$2,449,621.	$158,059.

NOTE A—The above statement reflects the operations of New York and Honduras Rosario Mining Company only, since that Company's subsidiary, New York and El Salvador Mining Company, Inc., which was incorporated in 1946, had at December 31, 1947 not yet started production.

ASSETS

CURRENT ASSETS

Cash		$ 232,556.	
Bullion at smelters and at mine—at realizable value less allowance for expenses		249,050.	
Marketable securities—at cost (aggregate quoted market prices $43,553.67 in excess of such costs)			
United States Government obligations..	$207,000.		
Domestic Corporation bonds	25,006.		
Domestic Corporation stocks	388,170.		
	$620,176.		
Interest accrued on bonds	2,230.	622,406.	
Accounts receivable		80,849.	
Broken ore in stopes and mill bins — at cost		193,894.	
Inventories — materials and supplies — at cost		951,268.	
TOTAL CURRENT ASSETS			$2,330,023.

INVESTMENTS AND OTHER ASSETS

Neptune Gold Mining Company, ten year 5% income debenture notes due March 1, 1948, principal amount $156,823.58 and 5,610 shares of its capital stock of no par value — at cost			158,390.

PREPAID ITEMS, ETC.

Inventories of supplies, prepaid insurance, taxes and other expenses			181,374.

BUILDINGS, MACHINERY AND EQUIPMENT

At cost		$2,490,891.	
Less allowance for depreciation		2,071,062.	419,829.

MINES, REAL ESTATE AND CONCESSIONS

At valuation originally established in 1880		$1,500,000.	
Less allowance for depletion and $207,411.48 charged to earned surplus at December 31, 1947		1,500,000.	
		$ —0—	
New mining properties and development expenses thereon not yet in production — at cost		1,907,438.	1,907,438.
			$4,997,054.

BALANCE SHEET
31, 1947

LIABILITIES

CURRENT LIABILITIES

Dividends payable — January 5, 1948		$ 92,816.	
Accounts payable		143,249.	
Drafts payable		52,877.	
Federal and other taxes — estimated		242,338.	
Government of Honduras, C.A. tax for year 1947	$ 23,299.		
Less balance of advance under Decree No. 67	21,525.	1,774.	
TOTAL CURRENT LIABILITIES			$ 533,054.

CAPITAL STOCK AND SURPLUS

Capital Stock (par value $10.00 per share) :			
Authorized and issued	188,367 shares	$1,883,670.	
Less in treasury	2,735 shares	27,350.	
Outstanding	185,632 shares	$1,856,320.	
Earned Surplus		2,607,680.	4,464.000.

$4,997.054.

Marketable Securities

December 31, 1947

	Par Value	Quoted Market Prices December 31, 1947	
UNITED STATES GOVERNMENT SECURITIES			
Treasury bonds:			
2½% due December 15, 1972-67	$ 57,000.00	$ 57,142.50	
Savings bonds:			
2½% Defense Series "G" due May 1, 1953	50,000.00	50,000.00	
2½% Defense Series "G" due January 1, 1955	100,000.00	100,000.00	$207,142.50
DOMESTIC RAILROAD BONDS			
New Orleans, Texas and Mexico Railway Co., 1st Mortgage 5½%—Gold Bonds, Series "A" due, April 1, 1954	25,000.00	22,500.00	22,500.00
STOCKS	No. of shares		
American Chicle Co., common stock, no par	1500	73,125.00	
The Commonwealth and Southern Corp., $6.00 cumulative preferred stock, no par	550	52,800.00	
The Home Insurance Co., New York, capital stock par value $5.00 per share	1500	34,500.00	
Iowa Southern Utilities Company of Delaware: common stock, par value $15.00 per share	2100	26,250.00	
Jersey Central Power and Light Co., 4% cumulative preferred stock par value $100.00 per share	500	41,000.00	

STOCKS (continued)

Public Service Co. of Indiana, Inc., common stock, no par	500	18,000.00	
Standard Oil Co. of California, capital stock, no par	500	31,312.50	
Standard Oil Co., of New Jersey, capital stock, par value $25.00 per share	1000	79,125.00	
Socony Vacuum Oil Co., capital stock, par value $15.00 per share	1500	25,500.00	
San Jose Water Works, common stock, par value $25.00 per share	500	11,750.00	
California Water Service Co., common stock, par value $25.00 per share	625	17,500.00	
Tide Water Power Co., common	3000	21,750.00	
Indiana Gas and Water Co., Inc., common stock, par value $10.00 per share	100	1,475.00	434,087.50
			$663,730.00

OTHER INVESTMENTS (at cost)

Neptune Gold Mining Company ten year 5% income debenture notes due March 1, 1948, principal amount $156,823.58 and 5,610 shares of its capital stock of no par value	$158,390.02

Report of Auditors

To the Stockholders of
New York and Honduras Rosario Mining Company:

We have examined the consolidated balance sheet of NEW YORK AND HONDURAS ROSARIO MINING COMPANY and its subsidiary, NEW YORK AND EL SALVADOR MINING COMPANY, INC. as of December 31, 1947, and the statement of income and surplus for the year then ended, have reviewed the system of internal control and the accounting procedures of the Companies, including minutes of stockholders' and directors' meetings, and have examined or tested accounting records of the Companies and other supporting evidence at their offices in New York and at the mines, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary.

Cash, securities and bullion were verified by actual count, inspection of documents and by direct communication with custodian or depositaries.

In our opinion, the accompanying balance sheet and related statement of income and surplus present fairly the consolidated position of NEW YORK AND HONDURAS ROSARIO MINING COMPANY and its subsidiary at December 31, 1947, and the results of operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST.

New York, N. Y.
March 5, 1948.

January 1, 1948.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company,
120 Broadway,
New York, N. Y.

Gentlemen:

The following report covers your mining operations in Central America throughout the year 1947.

THE ROSARIO MINE (HONDURAS)

Ore Reserves

Ore reserves are again segregated into two groups. Active Reserves as listed in Annex "A" are based on silver at 70 cents and gold at $35.00 per troy ounce. They are readily accessible to take advantage of any sudden change in the normal mining program. Inactive Reserves, shown in Annex "B" are not commercially usable at the present price, being either too low grade or not yet accessible to extraction.

Active Ore Reserves

	Tons Ore Plus Waste	Av. Troy Ozs. per Ton Ag.	Au.	Total Troy Ozs. Per Ton Ag.	Au.
January 1, 1947	687,691	16.66	.1077	11,458,810	74,036
January 1, 1948	671,614	16.43	.1119	11,032,869	75,152
Decrease	16,077	0.23		425,941	
Increase			.0042		1,116

Inactive Ore Reserves

January 1, 1947	48,435	7.27	.0575	352,189	2,785
January 1, 1948	44,389	7.16	.0600	317,814	2,661
Decrease	4,046	.11		34,375	124
Increase			.0025		

The relatively high price of silver prevailing late in 1946 and early in 1947 prompted the initiation of a program to recover many old workings where commercially recoverable old fills were known to exist. The quick execution of the program made it possible to take advantage of such fills throughout the entire year. Territory for new exploration and development, within the confines of known veins, also became available through such work.

FOOTAGE DRIVEN

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet
1946	13,940	6,671	8,014	28,625
1947	16,880	7,462	8,129	32,471
Increase	2,940	791	115	3,846

The diamond drilling program to date has been confined to the Santa Fe section. New exploration crosscuts that have been outlined for several years will be started during the year and will be detailed later in this report.

Exploration Crosscuts Above the Peña Blanca Level

U600 Culebra Stringer

A short crosscut from the Culebra Stringer to the South San Miguel Stringer vein allowed 150 ft. lateral development on the latter. No addition to the reserves resulted.

U350 Candelaria

Crosscut No. 26 mentioned in last year's report was completed to the Buena Ventura and West veins. Nothing of importance was found and all work has been discontinued. A total of 532 ft. was driven during the year.

U150 Independencia

A crosscut known as No. 61-N was started in Block 71 from the Independencia and driven 160 ft. north. The object was to cut any upward continuation of any of several known stringers on the zero and L200 levels. This work has been stopped since no veins of importance were found.

U150 Salvador

Crosscut No. 40-S was started in Block 70 from Branch No. 4 Salvador. At 340 feet the eastern continuation of the Independencia vein was cut, allowing 350 feet of lateral development on the U150 level. A level on the U250 is now being driven, and is known as Independencia — 4. Although this ore is low grade, it has permitted an addition of 7,283 tons of 14 oz. silver and .05 oz. gold per ton to the active reserve. Development will be continued.

Exploration Crosscuts Below the Peña Blanca Level

Zero Colonia

From the Colonia vein in Block No. 45, crosscut No. 41 was driven southwest for a distance of 150 feet, primarily to cut the old Candelaria fills and at the same time to prospect the Candelaria — 2, which had been opened up on the U150 level in Block No. 41 while working on the old Candelaria fills. Considerable ore has

been developed on this vein, which will be taken up under Candelaria Branch--2 Vein. Active work will continue during the year.

L400 Carmen

As mentioned in last year's report under L400 Salvador, crosscut No. 125 was started east in Block No. 63 from the fault vein which had been followed. At 220 feet the Veta 4 South vein was cut and developed 200 feet laterally to date. The values are very erratic, and the vein is so badly faulted that it is almost impossible to follow it. A small addition to the reserve resulted, and additional lateral and vertical development during the year should open up additional low-grade ore.

L500 Independencia

Crosscut No. 54 was driven north in Block No. 82 for 200 feet. At 140 feet a stringer vein was cut, which was developed laterally 180 feet. A small tonnage will be mined from it, but insufficient to show on active reserves.

L1150 Rosario

This crosscut was driven a total of 1700 feet during the year, and it is now expected to reach the projection of the Rosario vein early in 1948. Provided the vein is present on the lower 1150 level, development will be started as soon as possible.

Additional Crosscuts

A total of 4,050 feet was driven during the year in connection with the regular mining operations and in gaining entrance to old fills, which were mined actively until the drop in the price of silver prohibited their use on a larger scale. Provided the price of silver remains above 70 cents, these crosscuts will still serve their purpose for pulling considerable tonnage from old fills.

Diamond Drilling

As the diamond drill was delayed in delivery, a substantial part of the proposed drilling program could not be completed during the year. The total footage drilled during 1947 was 1473 feet.

Hole No. 28

This hole was started in Block No. 89 on the L650 level of the Santa Fe—2 group. It was drilled south 2° west at minus 36° from the horizontal for a depth of 710 ft., reaching a vertical depth of 410 ft. below the L650 level. The object of the hole was to explore the territory ahead of the present face of the L650 crosscut and at the same time secure information to guide future exploration at depth.

It was anticipated the sedimentary rock would be cut south of a known calcite-bearing fault, but the entire hole was in an-

desite. At 35 ft. a 12-in. vein assaying 31 oz. silver and .15 oz. gold was cut. At 340 ft., or approximately where the calcite fault vein should be, the drill passed through a small vein assaying 16 oz. silver and .17 gold. Due to the poor sludge and core return, the exact width could not be determined. Between 500 and 540 feet a series of small veins was cut varying from 3 inches to 48 inches in width, the best result being from a 6 in. vein carrying 11 oz. silver and .05 gold.

Hole No. 29

After completing hole No. 28 it was decided to drive hole No. 29 from the same set-up and on the same bearing, but horizontally. The hole was driven 380 ft. The object was to prove up the stringers cut in hole No. 28 and at the same time definitely locate the contact between the igneous and sedimentary rocks. At 30 ft. the sludge showed 6 oz. silver and .03 gold, indicating that this could be the same stringer that was cut in No. 28, which gave 31 oz. silver and .15 oz. gold over 12". At 95 ft. a 10" core sample gave 52 oz. silver and .35 gold; this more or less lines up with the stringer cut in hole No. 28 at 340 ft. or near the calcite fault. Also at 220 ft. a 4" stringer was cut giving a value of 12 oz. silver and .165 gold.

At 360 ft. the contact was cut, having an approximate dip of 45° south, indicating that it would be impossible to cut the contact with hole No. 28. In view of the encouraging samples found in this hole the crosscut will be driven to the contact.

Hole No. 30

This hole was started in Block No. 88 on the L650 and driven N 18 W and 55° down from the horizontal. The object of the hole was to cut the Santa Fe stringer, Santa Fe—2, and San Benito—2 at depth, which would require a hole of about 600 ft. At the end of the year it was down 383 ft. Numerous small stringers have been cut, but in a way the hole has been a disappointment as the sludge was lost at 220 ft. The hole was expected to cut the Santa Fe—2 at 300 ft., but with a poor core return and no sludge the purpose in a way has been defeated.

The information gained from these holes will be a great help once the geological survey is initiated.

General Exploration Plan for the Year 1948

Apart from short exploration crosscuts from the various veins in search of branch veins, the immediate future exploration program can be summarized in the following order:

(1) Active and continuous driving of the L1150 Rosario crosscut and lateral development on the Rosario vein once it has been cut.

(2) Start as soon as possible a crosscut from the L300 Colonia in Block No. 41 in the vicinity of Raise 7 and drive west to the Concepción. This will explore the remaining territory for

parallel veins between the Colonia and Concepción, San Miguel group. The chances are not considered too good for cutting any large vein system, but this territory should be explored and this is the most opportune time while No. 8 shaft is in operation for supplying material.

(3) Continue L400 Colonia—2 Drift East as long as it has any possibilities, then change to a crosscut to the Rosario—2 Vein. At some favorable location between Block 38 and 36 a short north-south crosscut should be driven.

This is considered one of the most favorable places left for exploration as there are several surface showings over this area.

(4) A crosscut southeast starting in Block No. 42 from L200 Colonia in the vicinity of Raise 1 to Block No. 37 Nueva. This crosscut would not only cut any extensions of Colonia—2, Colonia—3, and Nueva veins, but would also cut the downward projection of some known surface showings.

(5) An exploration crosscut to start from the L650 San Benito—2 extreme West end, and to be driven Northwest to cut the extension of the Jucuara—2 vein in Block No. 103. Provided the ore occurrence and vein structure extends farther to the west with depth, as it seems to, the extensions of the following veins would be cut as well as any new veins that might exist: Santa Fe —1, Independencia, San Blas—1, San Blas—2, Salvador, and all of the Jucuara group. Inasmuch as this project involves exploration covering 2,500 feet, consideration will be given to driving also southeast from the west end of Jucuara No. 2.

(6) L650 Santa Fe—crosscut on Diamond Drill Hole No. 29 to the contact.

Vein Development and Stoping

Of the total of 199,889 tons of ore sent to the mill during 1947, 23,437 tons or 11.75% came from old fills; 17,030 tons or 8.55% from ore not on the blocked-out reserve, and 25,779 tons from development or 12.9%. By following this program it was necessary to take only 133,643 tons of ore from our active and newly developed ore reserves combined.

Salvador Group

Salvador Vein

Again the Salvador was the second largest producer with 21,630 tons extracted, of which 2,018 tons came from development. Continued effort in searching out its branches may still develop additional low grade ore. 29,425 tons of 14 oz. silver and .04 oz. gold per ton remain on the active reserve.

Carmen—2

During the year an additional 802 tons were extracted from this vein which carried no active reserve.

Jucuara—1 (Fortuna)

This vein, with 27,064 tons, was again the largest single producer. Of the total mined 97½% came from stoping operations. 75,497 tons of 20 oz. silver, .05 oz. gold remain on the active reserve. Continued effort will be made to find additional branches and extensions.

Fortuna North

Stoping operations were continued on a small scale during 1947 and 3,234 tons were extracted, all from stopes. During 1948 it is proposed to develop further the upper reaches of this vein. 1,104 tons of 14 oz. silver and .02 oz. gold remain on reserve.

Independencia Group

Independencia Vein—1 and Independencia—4

Development, continued during the year on the extensions of the Independencia, exposed some additional ore. An additional small tonnage can be expected in 1948. 2,062 tons were extracted in 1947, of which 1,564 tons came from development, leaving 10,178 tons of 13 oz. silver and .06 oz. gold on reserve.

San Blas—1 Vein

During the year 1,736 tons were taken from this vein, leaving no reserve. It is proposed to crosscut it on the U450 at some future date.

San Blas—2 Vein

Only 1,950 tons were extracted in 1947, and its reserve is left almost the same as last year.

Jucuara Group

Jucuara—2 Vein

The development program planned for 1947 on this vein below the mill haulage level only partially materialized, due to delay in the arrival of equipment.

During the year 2,540 tons were extracted, of which 1,399 came from development. There remain 22,832 tons of 14 oz. silver and .18 oz. gold on the active reserve.

Jucuara—3 Vein

Stoping continued on about the same scale as the year before, 4,010 tons being produced, mostly from stopes.

Jucuara—4 Vein

Stoping and development continued throughout the year, producing 6,729 tons, of which 1,395 came from development.

Jucuara—8

Mining yielded 2,156 tons, all from stopes. There may still be a small tonnage in 1948.

Jucuara—9

This vein was mined actively during the year and produced 6,134 tons. There remains a possibility of obtaining additional ore on the L200 level, but should this prove fruitless the vein will be depleted in 1948.

Jucuara—13

This vein, mentioned in the 1946 report for the first time, produced 2,347 tons from stoping and 538 tons from development. There is a small tonnage left for 1948.

56 Fault Vein

During the year, 2,050 tons were extracted from this vein. During 1948 it is proposed to stope it at an increased rate.

Santa Fe Group

Santa Fe Main

This vein, for many years not mentioned until last year, produced 1,022 tons from development and additional tonnage noted under old fills

Development on a sub level under the L500 level has dictated the necessity of exploring it further on the L650. This work has been started, and it is hoped that 1948 will show an increase to our reserves from this work.

Santa Fe—1

This vein was mined only on a small scale during the year, following the policy of saving the Santa Fe group as much as as possible for future needs.

Santa Fe—2

No mining was done on this vein during the year. The small production of 508 tons came from previously broken ore in stopes.

San Benito—1

The San Benito 1 and its branches were mined actively during the year and produced 7,586 tons, mostly from stopes. It is proposed to mine it at about the same rate in 1948.

San Benito—2

1,354 tons were taken from this vein during the year. Present plans are not to mine it in 1948.

Old Mine Group

None of the following veins were mined in 1947, and their reserves remain the same: Capitana—1, Capitana—2, Esperanza, Porvenir, San Joaquin, Southwest—3, and Southwest—5.

Catalina—2

A small tonnage of 1,262 was mined during the year. It is not planned to mine it in 1948 for the same reasons stated in last year's report.

Colonia—1—2—3

To obtain the grade of ore required by fluctuating silver prices during the year, it was necessary to extract a larger tonnage than anticipated from the Colonia—1.

The Colonia—1 produced 14,179 tons, 1,157 coming from development. Mining for 1948 will be on about the same scale.

Colonia—2, which is a small vein crossing the Colonia—1, produced 487 tons.

Colonia—3, also a vein crossing the Colonia—1, was opened while crosscutting to the L300 Nueva to obtain ore from old fills. It produced 475 tons, all from development. This work has allowed the blocking out of 4,590 tons of 10 oz. silver, .14 oz. gold on the active reserve.

Crisanta No. 1 Vein

The same as in 1946, the greater part of the 3,112 tons produced of low-grade ore, came from ore broken in 1946 while silver commanded a price of up to 90 cents per oz. Very little work is planned on this vein for 1948.

Culebra—1 and 2

Development work on these veins turned out quite favorably, permitting the blocking out of 9,509 tons of new ore, of 25 oz. silver and .12 oz. gold per ton, on the L200, L300, and below the floor of the L300. The greater part of the development ore recorded from Culebra No. 2 is in reality from Culebra No. 1, as it was impossible for some time to distinguish between the two veins. It is planned to push the work from the L400 northwest to get under the ore in these two veins as soon as possible, and provided ore occurs on the L400 a crosscut will be started at once from the L650 to cut the downward extension of the Culebra veins.

The two veins combined, produced 8,635 tons, 1,850 tons from development.

Culebra Stringer Vein

This was the fourth largest producer with 10,235 tons. As mentioned last year, the development possibilities are about ex-

hausted, but some small additions will continue to be made as stoping progresses. It is planned to mine it at about the same rate as last year.

Northwest and Northwest—2

These two veins were mentioned in last year's report under one heading, and the ore from the two has been carried under the Northwest for 1947. For the new reserves they will be blocked out separately, and the branch vein will be known as Northwest—2. The combined tonnage from the two was 3,336, with 2,579 tons coming from development. Additional work is planned on both veins for 1948, and additional ore can be expected.

Candelaria and Candelaria—2

823 tons were produced from the Candelaria main vein during the year. 2,006 tons from development is listed under this vein, but actually was mined on what will be known as Candelaria—2 from now on. This stringer vein was opened up during our mining operations, to secure entrance to old fills. Development on the "0", U150 and U250 has enabled us to block out 15,944 tons of 10 oz. silver and .06 oz. gold. Development will be pushed during 1948, and additional ore can be expected.

South San Miguel Vein

Mining on a small scale produced 1,036 tons during the year. Due to its grade and dilution caused by bad walls, this ore can be mined only during a time that silver commands a price above 65 cents per oz. Mining will continue in 1948 on about the same scale.

Rosario Main, Rosario Stringer—1, and Rosario Stringer—2 ....

For the first time in many years the Rosario Main Vein appears in the production list. It produced 5,090 tons of good grade ore, and production will continue in 1948. All efforts will be made to find additional branches of or extensions to this old vein

The Rosario Stringer—1 produced 989 tons, 395 coming from development. A small addition to reserves will be shown.

The Rosario Stringer—2 produced 351 tons. No reserve is carried on it for 1948.

Southwest—1 Vein

This vein, with only 4,265 tons on active reserve at the first of last year, produced by active stoping and development 8,694 tons, besides leaving a blocked-out reserve of 10,433 tons of 12 oz. silver and .03 oz. gold. Work will continue in an effort to develop still more ore on its extensions.

Other Veins

Veta—4 South

Due to the lowered prices of silver during most of the year, this vein was not worked as extensively as first proposed. 6,315 tons were extracted.

During the latter part of the year it was cut on the L400 level, giving spotty high-grade samples. It will be further developed during the year on the L400 and L300. There remain 36,773 tons of 18 oz. silver and .03 oz. gold on the active reserve.

Veta—4 North

This vein came under the same category as Veta—4 South. During the year development work was done on the zero and L200 levels, permitting us to add 9,000 tons to its ore reserve, besides what was extracted.

Santa Gertrudis—2

1,492 tons were produced during the year, all from development. It now shows an active reserve of 5,961 tons of 10 oz. silver and .03 oz. gold. Further work will be done during the year.

Old Fills

The work, started during 1946, was continued throughout 1947 in an effort to re-open some of the old veins for additional low-grade ore to take advantage of better silver prices, thereby conserving some of the better reserves for the future. Recovery of old veins resulted in the addition of 15,944 tons of fair grade to the active reserve on the Candelaria—2. Provided conditions permit during the year, a continuation of recovery work should prove profitable, not only to get at old fills, but to explore still further the veins themselves.

A total of 23,437 tons was produced from this work, with the greater part obtained from the following veins:

Candelaria	3,421	tons
Salvador	1,124	"
Colonia	1,671	"
Nueva	1,498	"
Northwest	1,577	"
Santa Fe Main	5,486	"
Rosario	1,265	"
Santa Gertrudis	1,894	"
Buena Ventura	1,106	"

Miscellaneous veins producing the rest.

The goal of obtaining as much as 25% of the tonnage from old fills, ore not on reserve, and from low-grade development, was more than met even under lower silver prices than first anticipated. The same program is proposed for 1948, as only by such methods can the life of the mine be prolonged, thereby giving additional time to search for new sources of ore.

Ore Production (Delivered to the Mill)

	1944	1945	1946	1947
From Stopes (Tons)	167,263	167,970	178,873	174,110
From Development (Tons)	20,390	25,096	23,352	25,779
Total	187,653	193,066	202,225	199,889

General Mine Comments

A scarcity of labor throughout most of the year prohibited the carrying out of much of the exploration planned. Even at the expense of very necessary exploration, the tonnage mined fell considerably below that milled. The outlook at the beginning of this year regarding labor is not good, either as to supply or efficiency. Increased mining activity, as well as other industrial progress in Honduras, accounts in large measure for this difficulty. A definite effort is being made to train additional miners from less skilled labor, and it is believed that more normal operations will be possible by the middle of the year at least. Special attention is being devoted to a solution of this problem.

Pending further light on depth possibilities, actively being pursued at present, no favorable developments have occurred that give any indications of the existence of new ore zones.

On the other hand, continuous development of old vein branches responded quite favorably, and should continue partially to offset depletion; but only low-grade ore may be expected from such work.

The proposed geological study, mentioned last year, is still very much in mind and is deemed essential. It will not be undertaken until the staff is better organized and the outside properties are in production and operating smoothly. It is hoped that it will be possible to get it underway during 1948.

The Mill

Although the over-all year recovery suffered in comparison to the previous year, the modernization of our mill compressor plant, with a marked saving in power consumption, resulted in bringing the recovery for the last five months up to an average of 92.6% of the silver and 94.9% of the gold. The efficiency of the plant is now considered to have reached as high a degree as is economically possible.

New Properties

El Mochito Mine (Honduras)

Unavoidable and protracted delays in securing required equipment has delayed the operation of this property; but it is now anticipated that production will be undertaken during March or April of 1948. While there has been considerable exploration

during the past year, it is deemed preferable at this time to list the reserves at the same figures given a year ago, viz:—100,000 tons of 40 oz. silver and .03 gold, with an additional 10,000 tons of 15 oz. silver to be reasonably expected from smaller deposits so far developed.

El Dorado (Salvador)

The same conditions in respect to delayed equipment mentioned in the foregoing references to the El Mochito property apply to this property, although it is hoped that production may be undertaken by the early part of March 1948. Exploration has also proceeded here at a satisfactory rate, but for the purposes of this report the same reserves of 85,000 tons of .28 oz. gold will be recorded.

El Transito (Honduras)

Continued development on this property proved that the high grade ore exposed on the surface did not continue at depth. The possibility is being considered of installing a small plant with the idea of salvaging some of the expenditures incurred upon this property.

Yuscaran Mines (Honduras)

The work upon this property (which has been discontinued temporarily) has been below expectations. However, as in the case of El Transito, consideration is being given to the installation of a small plant, through which operation some at least of the present investment may be recouped.

Aguacate District (Costa Rica)

This venture proved to be disappointing. 3,680 feet of recovery of old workings and 6,591 feet of new exploration failed to develop tonnage or value comparable to that mined in the past. All work was stopped in March 1947, and the options were cancelled.

Company Staff

It is a great pleasure for me to testify to the loyalty and deep interest of the members of the staff, who have with much unselfishness devoted themselves to the many extra burdens the past year has imposed, and also to acknowledge the high spirit of cooperation we have received from the several divisions of the New York Office.

Respectfully submitted,

K. H. Matheson,

General Manager.

ANNEX "A"—ACTIVE ORE RESERVES FOR 1947

Estimated Reserves (13 & 14 cu. ft. per ton)	Avg. Width Feet Vein	Waste	Stope	Tons Ore & Waste	Avg. Troy Ozs. per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Independencia Group								
Independencia—1	2.75	1.25	4.00	2,895	11	.07	30,943	216
Independencia—4	2.52	1.65	4.17	7,283	14	.05	103,302	361
San Blas—2	0.96	1.75	2.71	15,301	10	.07	152,727	1,124
Salvador Group								
Carmen—1	2.11	1.39	3.50	1,427	18	.08	25,542	116
Fortuna—North	2.11	1.39	3.50	1,104	14	.02	15,295	27
Jucuara—1 (Fortuna)	2.25	1.34	3.59	75,497	20	.05	1,492,725	3,879
Salvador	1.59	1.75	3.34	29,425	14	.04	403,399	1,233
Jucuara Group								
Jucuara—2	2.85	1.76	4.61	22,832	14	.18	312,272	4,062
Jucuara—3	1.57	1.93	3.50	5,856	8	.09	46,534	544
Jucuara—4	1.58	1.88	3.46	24,939	19	.07	473,953	1,793
Jucuara—9	1.92	1.58	3.50	7,330	9	.05	66,450	366
Jucuara—12	1.12	1.88	3.00	2,185	10	.07	22,032	147
Jucuara—13	3.07	1.43	4.50	1,337	9	.07	11,856	100
56 Fault Vein	2.12	1.88	4.00	6,750	10	.09	64,126	620
Santa Fe Group								
Santa Fe Main	3.14	1.36	4.50	6,156	16	.06	77,063	385
Santa Fe—1	2.27	1.41	3.68	6,787	13	.18	89,354	1,211
Santa Fe—2	2.44	2.51	4.95	46,465	44	.44	2,065,047	20,489
Santa Fe—3	2.35	1.65	4.00	6,230	32	.36	201,688	2,246
San Benito—1	1.24	1.76	3.00	6,806	12	.12	79,114	849
San Benito—2	1.81	1.33	3.14	33,208	20	.23	651,018	7,674
Old Mine Group								
Candelaria Branch—2	1.33	1.67	3.00	15,944	10	.06	151,618	995
Capitana—1	0.82	2.18	3.00	6,102	5	.16	27,746	949
Capitana—2	1.14	1.36	2.50	3,806	5	.10	20,197	386
Catalina—2	1.34	1.66	3.00	9,018	16	.02	146,968	165
Colonia—1	1.33	2.00	3.33	56,797	12	.16	706,409	8,834
Colonia—2	1.24	1.76	3.00	5,261	8	.07	42,887	393
Colonia—3	1.57	1.43	3.00	4,590	10	.14	46,596	630
Crisanta—1	1.10	1.53	2.63	5,405	8	.02	44,775	96
Crisanta—2	0.68	2.32	3.00	5,313	11	.02	58,882	127
Culebra—1	1.81	1.44	3.25	18,042	19	.08	337,538	1,367
Culebra—2	1.71	1.29	3.00	16,740	16	.06	275,708	943
Culebra Stringer	1.72	1.53	3.25	24,791	12	.04	298,666	924
Esperanza	0.89	2.11	3.00	8,267	11	.03	87,858	235
Guadalupe	1.86	1.14	3.00	2,727	12	.09	33,415	255
North West—1	1.94	1.46	3.40	7,452	12	.13	88,610	967
North West—2	1.32	1.68	3.00	2,632	7	.08	19,405	219
North West—3	1.31	1.69	3.00	1,247	16	.15	20,403	187
Nueva	1.27	1.73	3.00	5,274	10	.21	53,868	1,103
Porvenir	1.23	1.77	3.00	6,706	8	.02	56,656	140
Rosario—1	2.46	1.79	4.25	2,750	19	.06	52,845	172
Rosario Stringer—1	1.12	2.18	3.30	9,996	10	.05	104,509	506
Rosario—2	2.06	0.94	3.00	5,560	8	.10	43,720	570
San Joaquin	1.24	1.76	3.00	3,538	19	.28	68,717	987
South San Miguel	1.52	1.48	3.00	4,766	12	.05	55,814	219
South West—1	2.02	2.11	4.13	10,433	12	.03	123,351	360
South West—3	1.44	3.06	4.50	3,920	20	.04	78,203	142
South West—5	1.91	2.09	4.00	4,526	14	.03	65,307	143
West	1.61	1.89	3.50	5,304	7	.15	38,044	773
Other Veins								
Santa Gerturdis—2	1.65	1.35	3.00	5,961	10	.03	59,530	176
Veta—4—North	1.86	1.44	3.30	21,534	11	.03	240,476	553
Veta—4—South	1.41	1.59	3.00	36,773	18	.03	648,514	1,012
TOTAL—Forward				630,988	16.61	.1141	10,481,635	71,970

Broken Ore in Stopes (21 cu. feet per ton)

	Avg. Width in Feet Vein	Waste	Stope	Tons Ore & Waste	Avg. Ounces Per Ton Ag.	Au.	Total Ag.	Ozs. Au.
FORWARD				630,988	16.61	.1141	10,481,635	71,970
Colonia				7,935				
Crisanta				513				
Culebra—1				878				
Culebra Stringer				3,640				
Fortuna				1,064				
Jucuara—1				5,019				
Jucuara—4				400				
Jucuara—12				187				
Jucuara—13				1,403				
Nueva				1,974				
Rosario Main				577				
Rosario Stringer				725				
Salvador				4,254				
San Benito—1				3,780				
San Benito—2				1,332				
Santa Fe—1				1,278				
Santa Fe—2				132				
Veta—4—North				1,265				
Veta—4—South				2,035				
Mine Storage Chutes				1,726				
Mill Ore Bin				509				
				40,626	13.57	.0783	551,234	3,182
TOTAL				671,614	16.43	.1119	11,032,869	75,152

ANNEX "B"

INACTIVE ORE RESERVES

Estimated Reserves (at 13 cu. ft. per ton)								
Candelaria Main	1.38	1.79	3.25	5,097	6	.08	30,443	410
Candelaria Br. 1	1.07	1.93	3.00	4,636	6	.07	26,997	319
Colonia—1	0.64	2.36	3.00	3,992	7	.05	27,264	213
Culebra Stringer	1.46	1.54	3.00	9,180	7	.02	65,645	165
Jucuara—3	1.36	1.64	3.00	4,024	3	.10	13,410	413
North San Miguel	1.60	1.90	3.50	1,831	12	.05	22,134	95
Nueva	0.88	2.12	3.00	4,500	9	.09	40,468	401
Santa Fe Main	2.57	1.93	4.50	1,350	6	.02	7,710	31
Santa Fe—2	2.33	1.67	4.00	5,198	6	.05	29,548	284
San Joaquin	1.02	1.98	3.00	3,019	12	.10	37,232	298
Santa Gertrudis—1	1.32	2.18	3.50	1,562	11	.02	16,963	32
TOTAL				44,389	7.16	.06	317,814	2,661

Note on Reserves:

While it is inherently probable that the tonnages and grades, when actually mined from these individual veins, will vary somewhat from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

NEPTUNE GOLD MINING COMPANY

Annual Report for the Year 1947

To the Shareholders:

A summary of the report for the calendar year 1947 of Mr. C. E. Nelson, General Manager, is as follows:

"In previous annual reports mention has been made of destruction on March 20, 1946 of the Siempre Viva hydro-electric power plant. This plant w.ith a capacity of 1,000 K.W was completely buried by a landslide caused by a local earthquake. Although some equipment was salvaged, considerable new equipment had to be purchased. The plant was finally placed in operation during the summer of 1947. Nevertheless, work still remains to be done before it can operate continually at its rated capacity. The shortage of power throughout the first six months of 1947 had a serious adverse effect on all mining operations.

"During 1947, 11,912 feet of development work was completed in the Bonanza group of mines, of which 5,051 feet, or 42 percent, was in ore. During the last three months of the year, 563 feet of diamond drilling was accomplished at the Culebra and Hidden Treasure mines.

"Production figures for the Bonanza group for the year 1947 compared with those of 1946 are:

Year	Tons Milled	Average Ounces Gold per Ton	Contents of Bullion Produced and Shipped Ounces Gold	Ounces Silver
1946	237,502	0.265	55,916	85,908
1947	232,463	0.272	57,476	86,295

"In the Bonanza group of mines, the estimated total of assured, probable and prospective ore, as of December 31, 1947 is 839,562 tons, averaging 0.279 ounces gold per ton.

"At the property of the Compañia Minas Matagalpa, operated under a profit-sharing agreement under which that company receives 30 percent of the profits, 34,565 tons of ore were milled, assaying 0.203 ounces gold per ton. There were produced and shipped in the form of bullion 5,991 ounces gold and 11,531 ounces silver. Ore reserves at Matagalpa as of December 31, 1947 were 84,700 tons, averaging 0.231 ounces gold per ton.

"Both at Bonanza and at Matagalpa, operating costs increased due to higher costs of labor, freight, and supplies.

"During the year the Company's options on the Santa Elena and Babilonia prospects in the Chontales District, Nicaragua, were dropped."

The earnings from mine operations of the Company for the year 1947 before income charges and credits and provisions for depreciation and depletion were $605,933.18. Of this amount, $573,919.70 was attained at the Bonanza group of mines, and the balance of $32,013.48 from Matagalpa.

Balance Sheet as of December 31, 1947 and Statement of Income and Surplus for the year 1947 are embodied in this report.

Respectfully submitted,

R. F. GOODWIN,
President.

March 12, 1948.

NEPTUNE GOLD MINING COMPANY

Balance Sheet as of December 31, 1947

ASETS

CURRENT ASSETS:

Cash on hand and in banks		$ 254,127.32
Unliquidated bullion (conservatively valued based on mine assay)		394,579.09
Accounts receivable		15,365.35
Materials and supplies — including construction materials (at average cost)		1,019,909.64
Total current assets		$1,683,981.40
Unexpired Insurance		13,012.76
Mining Property, Options, Preproduction Costs, Buildings and Equipment — at cost	$3,046,949.03	
Less reserves for depreciation and depletion	2,125,775.96	921,173.07
Total		$2,618,167.23

LIABILITIES

CURRENT LIABILITIES:

Accounts and drafts payable		$ 143,172.04
Ten year, five per cent. income debenture notes, payable on or before March 1, 1948: Issued	$2,069,973.61	
Less paid to date (75% of original issue)	1,552,480.21	517,493.40
Accrued interest on ten year, five per cent. income debenture notes		12,937.33
Accrued payrolls and other expenses		68,055.83
Accrued U. S. income tax (estimated)		52,765.20
Total current liabilities		$ 794,423.80
Employer's Liability Reserve		11,617.16
Capital Stock (without par value) — authorized and outstanding, 20,000 shares		10,000.00
Surplus (see note)		1,802,126.27
Total		$2,618,167.23

NOTE: Surplus is restricted as to dividends on capital stock until all ten year, five per cent. income debenture notes, together with interest thereon, shall have been fully paid or provided for.

NEPTUNE GOLD MINING COMPANY

Statement of Income and Surplus

For the Year ended December 31, 1947

Value of bullion produced, less marketing expenses		$2,515,612.51
Operating and general expenses		1,909,679.33
Earnings from mine operations		$ 605,933.18
Provisions for depreciation and depletion		152,919.24
Balance		$ 453,013.94
Income credit — insurance received in connection with the partial suspension of operations resulting from destruction of property in 1946		54,407.16
Gross income		$ 507,421.10
INCOME CHARGES:		
Examination and exploration expenditures applicable to mining properties for which the options were relinquished	$ 87,624.84	
Interest on ten year, five per cent. income debenture notes	25,874.67	
U. S. income tax — estimated	50,000.00	163,499.51
Net income		$ 343,921.59
Surplus, January 1, 1947		1,458,204.68
Surplus, December 31, 1947 (see note to balance sheet)		$1,802,126.27

AUDITOR'S CERTIFICATE

NEPTUNE GOLD MINING COMPANY:

We have examined the balance sheet of Neptune Gold Mining Company as of December 31, 1947 and the related statement of income and surplus for the year ended that date. Our examination was made in accordance with generally accepted auditing standards and included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statement of income and surplus present fairly the financial condition of the Company at December 31, 1947 and the results of its operations for the year ended that date, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

HASKINS & SELLS.

March 9, 1948
New York.

MAR 2 2 1949

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NEW YORK AND HONDURAS ROSARIO MINING COMPANY



SIXTY-EIGHTH ANNUAL REPORT

NINETEEN HUNDRED AND FORTY EIGHT

NEW YORK AND HONDURAS ROSARIO MINING COMPANY

OFFICERS

April 7, 1948 to April 6, 1949

WM. A. PRENDERGAST, *President*

LEWIS L. CLARKE, *Chairman of Board* W. C. LANGLEY, *Treasurer*

RICHARD F. GOODWIN, *Vice-President* J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

April 7, 1948 to April 6, 1949

LEWIS L. CLARKE, *Chairman*

JULIAN B. BEATY	W. C. LANGLEY
RICHARD F. GOODWIN	LESTER S. OPPENHEIMER
DR. J. RALPH JACOBY	WM. A. PRENDERGAST
HERBERT A. KAUFMANN	M. F. SOTO

RICHARD H. VALENTINE

EXECUTIVE COMMITEE

April 7, 1948 to April 6, 1949

LEWIS L. CLARKE, *Chairman*	R. F. GOODWIN
JULIAN B. BEATY	DR. J. RALPH JACOBY
M. F. SOTO	RICHARD H. VALENTINE

WM. A. PRENDERGAST, W. C. LANGLEY } *Ex Officio*

PRESIDENT'S REPORT

January 1, 1949

To the Stockholders of the
New York and Honduras Rosario Mining Company.

The year just closed, the Sixty Eighth of the Company's history, has been notable for two reasons; (1) That the operations of the Rosario property have been very satisfactory, and (2) that two new properties have been placed in operation.

We must realize that the success of a company such as ours, transacting its principal business in a foreign country, owes much to the friendly cooperation of the government and people of that country. On January 1st of this year, a new administration entered into office in Honduras, with the inauguration on New Year's Day, of the Honorable Juan Manuel Gálvez as President, and the Honorable Julio Lozano, as Vice President. We extend to them our cordial felicitations, and wish for their great success in the service of the people of Honduras for whose helpful cooperation in the work of this Company we are deeply grateful.

At this time we also wish to express to the President who has retired, the Honorable Tiburcio Carias A., our high regard and appreciation of his ever friendly interest in the affairs of this Company, and wish for him much happiness in the future.

Conditions under which business is being done in these days are in many respects different from those prevailing in the pre-war period. This is especially true in the handling of mining operations, because of less efficient equipment, higher costs, and lack of available technical employees. To meet the new requirement is the responsibility of management and the test of its capacity, and this Company will respond energetically to the new demands that present economic necessities impose.

General Manager's Report (Pages 15 to 31)

This report gives in detail the latest information concerning the condition of the Company's original property, and a general statement upon the new properties.

Stockholders are urged to review this report.

Geological Survey:

It has been the Company's intention for several years to undertake a Geological Survey of the property, especially in view of the shrinkage in ton volume and ore values shown in the annual reports for a number of years, and to which attention has been specifically called in the annual reports. For this purpose we have retained the services of Mr. Arthur Notman of New York, and Dr. R. H. Carpenter of the Colorado School of Mines. Dr. Carpenter will direct the work at the Mine with a staff of assistants.

It is designed to have a thorough study made of the property to determine whether any recommendations might be forthcoming from new exploration over the entire mine; also on several key levels such as the Lower 650, Lower 300, Upper 150 and Upper 450, where the greatest accessibility exists on account of intensive exploration heretofore done on those levels.

As a part of the broad survey, detailed studies will be carried on in the regions most likely to develop interesting features for new exploration. It will be safe to estimate that the work now contemplated will cover a period of from eighteen months to two years, and an expenditure of at least $75,000.00. At the conclusion of the survey it is intended to have a geologist as a permanent member of our Staff.

Earnings for 1948:

It is gratifying to report an increase in earnings over the year 1947 of $71,102.81 which is due mainly to the better price obtained for silver, 74 cents plus, compared with the price secured in 1947 of 70 cents plus, and the higher production and price obtained for gold which amounted to $105,366.14. The Statement of General Operating and Financial Statistics gives in detail all the essential facts bearing upon the record for 1948, with comparative figures for 1947, and its study is earnestly recommended.

Other Properties:

There is included in this report a statement of the

"Investment in New Mines" now in operation, which gives all the pertinent facts concerning the financial aspects of these properties, and which shows a total investment in them at December 31, 1948 as follows:

El Mochito —	$1,020,732.13
El Dorado —	1,031,688.14
	$2,052,420.27

as compared with ..... $1,980,501.98 on December 31, 1947. The other new properties, El Tránsito and Yuscarán, still owned by the Company, will not be considered for even a limited operation until the El Mochito and El Dorado properties are further and satisfactorily advanced.

Honduras Income Tax Case:

In my reports for the years 1945, 1946 and 1947, I made reference to this subject. Under our present agreement with the Government of Honduras, we are required to pay to it a Tax of 7% on our Net Income, which we regarded as an Income Tax paid in a foreign country and deductible from the Income Tax paid in this country. The Federal Income Tax Bureau disallowed the deductions made by us for the years 1941 and 1942. This Company brought an action in the Tax Court of

the United States to set aside the action of the Tax Bureau, but the Tax Court upheld the Bureau, holding that the tax paid to the Government of Honduras was a business expense and only deductible as such. We appealed this ruling to the United States Circuit Court of Appeals, which in a decision in August 1948, reversed the Tax Court, and unanimously decided that the tax was an income tax paid in a foreign country and, therefore, deductible in full from the income tax payable to the United States of America.

The amount which would have been due the U. S. Government for the years 1941 to 1947 inclusive had we lost the appeal, (and no further litigation successful to us had ensued) would have been $159,996.38, and interest $28.366.61, or a total of $188,362.99. In addition to this we would have been required to consider the Honduras Tax as merely a business expense, which would have meant a considerable extra United States tax to pay during the life of Decree No. 67, to December 31, 1960. There was paid to our Counsel for their services in this litigation a fee of $45,000. or 23-89/100% of the saving effected as shown above.

Neptune Gold Mining Company:

The original Ten Year 5% Income Debenture Notes, of which on January 1, 1948 this Company held $156,823.58, were due March 1, 1948, and paid on that date as were all the outstanding Debentures. In view of heavy financial requirements for new equipment, the American Smelting & Refining Company, its Associate, Terra Nova Properties Ltd., and this Company, agreed to advance the sums required in accordance with their proportionate stock holdings. We have taken as our share $266,936.30 Ten Year 5% Notes due March 1, 1958.

A copy of the Annual Report of the Company will be forwarded to you when available.

Respectfully submitted,

WM. A. PRENDERGAST
President.

GENERAL OPERATING AND FINANCIAL STATISTICS

Years ended December 31, 1948 and December 31, 1947

	1948	1947	Decrease* Increase	
Number of men employed per working day	1,109	1,112	3	*
Tons of ore mined	212,435	186,229	26,206	
Tons of ore milled	199,800	199,900	100	*
Average tons milled per day, full running time	568	575	7	*
Ounces of silver recovered	2,389,353.01	2,403,499.63	14,146.62	*
Number of ounces of silver recovered per ton of ore	11.95872	12.02350	.06478	*
Silver recovered-percentage	90.231094	90.534249	.303155	*
Sales value of silver recovered	$1,769,076.00	$1,688,509.36	$ 80,566.64	
Average sales value of silver per ounce	$ .74039	$ .70252	$ .03787	
Average cost of silver per ounce**	$ .41197	$ .45786	$ .04589	*
Average profit on silver per ounce**	$ .32842	$ .24466	$ .08376	
Average sales value of silver recovered per ton of ore	$ 8.85423	$ 8.44677	$ .40746	
Average cost of silver per ton of ore**	$ 4.92667	$ 5.56508	$ .57841	*
Average profit on silver recovered per ton of ore**	$ 3.92756	$ 2.94169	$ .98587	

Ounces of gold recovered	13,305.182	11,928.780	1,376.402	
Number of ounces of gold recovered per ton of ore	.06659	.05967	.00692	
Gold recovered-percentage	94.2280	94.5591	.3311	*
Sales value of gold recovered	$ 585,056.38	$ 479,690.24	$ 105,366.14	
Average sales value of gold per ounce	$ 43.97	$ 40.21	$ 3.76	
Value of gold recovered per ton of ore	$ 2.92821	$ 2.39965	$ .52856	
Ratio of gold to silver	1:180	1:201	:021	*
Earnings	$ 588,000.10(A)	$ 516,897.29	$ 71,102.81	
Per share	$ 3.17(A)	$ 2.79	$ .38	
Dividends paid	$ 464,080.00	$ 371,264.00	$ 92,816.00	
Per share	$ 2.50	$ 2.00	$ .50	
Accretions to surplus	$ 163,798.91	$ 158,058.18	$ 5,739.73	
Income from investments	$ 71,466.00	$ 102,499.86	$ 31,033.86	*
Marketable securities owned as at December 31, 1948				
Cost	$ 411,319.91	$ 620,176.33	$ 208,856.42	*
Market	$ 471,567.44	$ 663,730.00	$ 192,162.56	*
Difference between cost and market	Plus 14-65/100%	Plus 7-02/100%	7-63/100%	

The Bullion Production from the organization of the Company to December 31, 1948, amounts to $81,134,176 and the dividends paid therefrom were $19,963,145.

(A) Before deducting loss in 1947 from abandonment of mining operations $146,443 less $55,649 tax saving therefrom.

** After credit for sales value of gold recovered.

INCOME AND SURPLUS STATEMENT

For the Years ended December 31, 1948 and December 31, 1947

	Year		Increase
	1948	1947	Decrease*
Production of gold and silver	$2,354,132.	$2,168,200.	$185,932.
Less freight and other expenses on bullion	106,202.	100,885.	5,317.
OPERATING INCOME	$2,247,930.	$2,067,315.	$180,615.
Operating expenses	1,335,107.	1,345,518.	10,411.*
MINE OPERATING PROFIT	$ 912,823.	$ 721,797.	$191,026.
New York administrative and general expenses	128,096.	133,752.	5,656.*
NET OPERATING PROFIT	$ 784,727.	$ 588,045.	$196,682.
Add income from investments, etc.	71,466.	102,500.	31,034.*
	$ 856,193.	$ 690,545.	$165,648.
Less other deductions from income:			
Interest	6,011.	15,994.	9,983.*
Provision for total cost of geological survey	75,000.	—0—	75,000.
State and city taxes	6,834.	2,863.	3,971.
Sundry	4,848.	3,343.	1,505.
	$ 763,500.	$ 668,345.	$ 95,155.
Taxes on income—estimated			
Federal income taxes	141,000	72,500.	68,500.
Government of Honduras, C.A.	34,500.	23,299.	11,201.
Equivalent of Federal income tax saving resulting from abandoned mining properties during year (as below)	—0—	55,649.	55,649.*
	$ 175,500	$ 151,448.	$ 24,052.
	$ 588,000.	$ 516,897.	$ 71,103.
Loss from abandonment of mining properties during year, $146,443, less tax saving, $55,649 therefrom (as above)	—0—	90,794.	90,794.*
NET PROFIT	$ 588,000	$ 426,103.	$161,897.
Add:			
Reserve set aside in prior year for costs absorbed in 1947:			
Special expansion projects	—0—	85,000.	85,000.*
Wage adjustments	—0—	40,000.	40,000.*
Cancellation of provision for taxes of prior years — no longer required	18,098.	—0—	18,098.
Balance transferred to earned surplus for year	$ 606,098.	$ 551,103.	54,995.
Dividends paid or provided for, totaling $2.50 per share in 1948 and $2.00 per share in 1947	464,080.	371,264.	92,816.
Addition to reserve for taxes in 1947, cancelled in 1948	(21,780.)	21,780.	43,560.
	$ 163,798.	$ 158,059.	$ 5,739.
Earned surplus—beginning of year	2,607,680.	2,449,621.	158,059.
Earned surplus—end of year	$2,771,478.	$2,607,680.	$163,798.

MARKETABLE SECURITIES

December 31, 1948

	Par Value	Quoted Market Prices December 31, 1948	
UNITED STATES GOVERNMENT SECURITIES			
Treasury bonds:			
2½% due December 15, 1972-67	$ 57,000.00	$ 57,267.19	
Savings bonds:			
2½% Defense Series "G" due May 1, 1953	50,000.00	50,000.00*	
2½% Defense Series "G" due January 1, 1955	100,000.00	100,000.00*	$207,267.19
DOMESTIC RAILROAD BONDS			
New Orleans, Texas and Mexico Railway Co., 1st Mortgage 5½%—Gold Bonds, Series "A" due, April 1, 1954	25,000.00	23,562.50	23,562.50
STOCKS	No. of shares		
American Chicle Co., common stock, no par	1200	49,650.00	
The Home Insurance Co., New York, capital stock par value $5.00 per share	1000	29,250.00	
Iowa Southern Utilities Company of Delaware; common stock, par value $15.00 per share	1500	16,875.00	
Public Service Co. of Indiana Inc., common stock, no par	500	10,312.50	
Standard Oil Co. of California, capital stock, no par	500	33,625.00	
Standard Oil Co. of New Jersey, capital stock, par value $25.00 per share	526	37,937.75	
Socony Vacuum Oil Co., capital stock, par value $15.00 per share	510	8,606.25	
San Jose Water Works, common stock, par value $25.00 per share	250	7,250.00	
California Water Service Co., common stock, par value $25.00 per share	250	6,625.00	
Tide Water Power Co., common, no par value	3000	19,500.00	
Indiana Gas and Water Co., Inc. common stock, par value $10.00 per share	75	1,106.25	240,737.75
			$471,567.44
OTHER INVESTMENTS (at cost)			
Neptune Gold Mining Company, ten year 5% note receivable due March 1, 1958, principal amount $266,936.30 and 5,610 shares of its capital stock of no par value — at cost			$269,557.70

* At face value

CONSOLIDATED

DECEMBER

ASSETS

CURRENT ASSETS		
Cash		$ 538,663.28
Bullion at smelters and at mines—at realizable value less allowance for expenses		464,965.28
Marketable securities—at cost (aggregate quoted market prices $60,247.53 in excess of such costs):		
United States Government obligations	$207,000.00	
Domestic Corporation bonds	25,006.25	
Domestic Corporation stocks	179,313.66	
	$411,319.91	
Interest accrued on bonds	1,861.46	413,181.37
Accounts receivable		105,544.19
Broken ore in stopes and mill bins — at cost		250,577.14
Inventories — materials and supplies — at cost		863,269.85
TOTAL CURRENT ASSETS		$2,636,201.11
INVESTMENTS AND OTHER ASSETS		
Neptune Gold Mining Company, ten year 5% note receivable due March 1, 1958, principal amount $266,936.30 and 5,610 shares of its capital stock of no par value — at cost		269,557.70
PREPAID ITEMS, ETC.		
Inventories of supplies, prepaid insurance, taxes and other expenses		136,713.73
BUILDINGS, MACHINERY AND EQUIPMENT		
At cost	$3,776,184.67	
Less alowance for depreciation	2,119,983.22	1,656,201.45
MINES, REAL ESTATE AND CONCESSIONS		
At valuation originally established in 1880	$1,500,000.00	
Less allowance for depletion and $207,411 charged to earned surplus at December 31, 1944	1,500,000.00	
	$ —0—	
Development costs and expenses to date on new mining properties, after applying net proceeds from bullion recovered	791,858.76	791,858.76
		$5,490,532.75

BALANCE SHEET
31, 1948

LIABILITIES

CURRENT LIABILITIES

Notes payable to bank on demand			$ 225,000.00
Dividends payable — January 6, 1949			129,942.40
Accounts payable			133,447.61
Drafts payable			42,893.74
Federal and other taxes — estimated			224,450.73
Government of Honduras, C.A. tax for year 1948 — estimated			34,500.00
Provision for estimated cost of geological survey — unexpended portion			72,500.00
TOTAL CURRENT LIABILITIES			$ 862,734.48

CAPITAL STOCK AND SURPLUS

Capital Stock (par value $10.00 per share):			
Authorized	188,367 shares	$1,883,670.00	
Less in treasury	2,735 shares	27,350.00	
Outstanding	185,632 shares	$1,856,320.00	
Earned surplus		2,771,478.27	4,627,798.27
			$5,490,532.75

EL MOCHITO

ASSETS

CURRENTS ASSETS		
Cash		$ 9,292.67
Accounts receivable		1,021.87
Inventories of material and supplies — at cost		97,274.28
TOTAL CURRENT ASSETS		$ 107,588.82
PREPAID ITEM		
Unexpired insurance		10,588.56
BUILDINGS, MACHINERY AND EQUIPMENT		
At cost		775,655.71
MINES, REAL ESTATE AND CONCESSIONS		
Properties, mining rights, etc	$ 89,278.06	
Development expenses	521,216.92	
Less net proceeds from bullion recovered	483,595.94	
Net development expenses	$ 37,620.98	
TOTAL		126,899.04
		$1,020,732.13

Represented by:

CURRENT LIABILITIES	
Accounts payable	$ 8,723.04
INVESTMENT	1,012,009.09
	$1,020,732.13

IN NEW MINES
31, 1949

EL DORADO		TOTAL	
	$ 11,596.38		$ 20,889.05
	24,818.36		25,840.23
	130,062.51		227,336.79
	$ 166,477.25		$ 274,066.07
	6,504.22		17,092.78
	471,058.77		1,246,714.48
$ 40,329.00		$ 129,607.06	
467,217.51		988,434.43	
119,898.61		603,494.55	
$ 347,318.90		$ 384,939.88	
	387,647.90		514,546.94
	$1,031,688.14		$2,052,420.27
	$ 11,652.82		$ 20,375.86
	1,020,035.32		2,032,044.41
	$1,031,688.14		$2,052,420.27

Report of Auditors

To the Stockholders of
New York and Honduras Rosario Mining Company:

We have examined the consolidated balance sheet of New York and Honduras Rosario Mining Company, and its subsidiary, New York and El Salvador Mining Company, Inc., as of December 31, 1948, and the related statement of income and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records, and such other auditing procedures, at the offices in New York and at the Mines, as we considered necessary in the circumstances. We also examined Minutes of Stockholders and Directors meetings.

In our opinion, the accompanying consolidated balance sheet and statement of income and surplus present fairly the financial position of New York and Honduras Rosario Mining Company, and its subsidiary, at December 31, 1948, and the results of operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST

New York,
March 9, 1949.

GENERAL MANAGER'S REPORT

January 1, 1949.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company
120 Broadway
New York, N. Y.

Gentlemen:

Operating results for the year 1948 and the present condition of your properties in Central America are set forth below.

THE ROSARIO MINE (HONDURAS)

Ore Reserves

Active and Inactive Ore Reserves are again based on silver at 70 cents and gold at $35.00 per troy ounce. Annex A and Annex B of this report list the vein reserves in detail.

Active Ore Reserves

	Tons Ore Plus Waste	Average Troy Ozs. per Ton Ag.	Au.	Total Troy Ozs. Per Ton Ag.	Au.
January 1, 1948	671,614	16.43	.1119	11,032,869	75,152
January 1, 1949	668,440	16.14	.1198	10,787,255	80,088
Decrease	3,174	0.29		245,614	
Increase			.0079		4,936

Inactive Ore Reserves

January 1, 1948	44,389	7.16	.0600	317,814	2,661
January 1, 1949	33,813	7.50	.0640	254,861	2,177
Decrease	10,576			62,953	484
Increase		.34	.0040		

An abnormal labor shortage throughout most of the year retarded all phases of exploration and development. Notwithstanding this adverse condition the development of new ore bodies practically offset depletion. A new vein known as Santa Fe 4 was encountered late in the year and is fully described under Vein Development. Old Fills continued to produce.

Exploration and Development

FOOTAGE DRIVEN

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet	Diamond Drilling
1947	16,880	7,462	8,129	32,471	1,473
1948	11,673	6.565	4,472	22,710	3,047
Decrease	5,207	897	3,657	9,761	
Increase					1,574

The diamond drilling program was pursued during the year in the mine and on the surface with unsatisfactory results. The nature of the ground makes drilling slow and expensive and the presence of open fissures makes the value of the sludge return, if any, doubtful. It has been decided to confine the diamond drilling to regions that it would not be economical to prospect by means of crosscuts and winzes.

Exploration Crosscuts above the Peña Blanca Level

Upper 350 Culebra Stringer

Crosscut No. 40 in Block 43 was continued for 386 feet to cut possible upward extension of Rosario Stringer No. 2. As nothing of interest was found it was stopped.

Upper 350 Fortuna

Crosscut No. 44, Block 71, was driven 519 feet east to prospect the area between the Salvador and V-4-South veins and to cut any possible southern extension of the Carmen. 35 feet of drifting was done on a cross vein that may be the Carmen, but as only a few scattered values were found, this work was discontinued.

Upper 350 Jucuara No. 3, Block 84

At Station No. 6131 it was decided to crosscut the area that lies from 350 feet to 400 feet above the Jucuara Nos. 2, 3 and 4 veins and west of the Southwest Fault system. This was driven S—45°—W for 433 feet and as nothing of importance was found this work was discontinued. At Station No. 6118 in Block 83, north and south crosscuts will be driven for about 100 feet on each side of Drift No. 39 to see if the upward extensions of the Jucuara No. 2 and Jucuara No. 3 have been missed. If this work proves fruitless, all material will be salvaged.

Upper 150 Santa Fe No. 1

Crosscut No. 50 was continued N—45°—E from Station No. 6029, Block 84, 223 feet where a faulted section of the Independencia Vein was found and a raise has been driven to the old Upper 250 level. This was done too late in the year completely to develop the ore found, although a small block has been added to the reserves.

Upper 150 Colonia, Crosscut No. 25

Since the Nueva Branch No. 1 has been found on the Lower 200, Lower 300 and Lower 400 levels, it has been decided to continue this crosscut from Block 43 near Station No. 6258 southeast to the Nueva Vein in Block 42. The chances of cutting the upward extension of the Nueva Branch—1 and Colonia—3 veins are considered favorable. 131 feet have been driven to date. This will be completed during the year.

Upper 250 Independencia

Crosscut No. 32 was started from the west end of Independencia No. 4, Block 74, and driven southwest to prospect the Independencia and Santa Fe country. An advance of 135 feet was made during the year. As no veins have been found the work has been temporarily suspended pending the results of the Geological Survey.

Exploration Crosscuts below the Peña Blanca Level

Colonia

Lower 300, Crosscut No. 156: This crosscut, mentioned in last year's report, to be driven to Concepción, was started in Block 41 and driven west 838 feet during the year. Several small stringers have been cut but nothing of value. This work is continuing and should be completed during 1949.

Lower 300, Crosscut No. 119, was started from the south end of the Colonia—1 in Block 44 and driven 60 feet south to cut an apparent split in the Nueva Vein. This split, hereafter to be designated as Nueva Branch No. 1, was found and developed for a horizontal distance of 227 feet east. This will be taken up later in the report on Nueva Branch—1 Vein.

Lower 400, Crosscut No. 135, was started from Nueva Vein Drift No. 97—E in Block 43 and driven south for a distance of 123 feet to cut the same split as mentioned under Crosscut No. 119 and will be mentioned later under Nueva Branch—1 Vein.

Lower 400, Crosscut No. 14, mentioned in last year's report, was driven 75 feet east along Colonia—2 Vein and then turned N—72°—E in Block 40 toward Rosario—2 Vein and driven 179 feet. It will be continued during 1949.

Guadalupe

Lower 650, Crosscut No. 35, was started in Block 51 and driven 182 feet northeast to cut the Nueva Vein on this horizon. The vein was not found. During 1949 a raise will be driven to the Lower 500 and Lower 400 levels where known ore on the Nueva Vein exists, but which is now inaccessible.

Jucuara

"O" Jucuara—1, Crosscut No. 59, was driven north in Block 82 to cut any possible continuation of Jucuara—2 and Jucuara—4 and to cut Jucuara—12. Outside of several narrow stringers, nothing was encountered. 241 feet of crosscut was driven and this work has been discontinued.

North West

Lower 400, Crosscut No. 133: On the Lower 400 level at the intersection of the North West and Rosario veins, Block 46, this crosscut was started and driven 267 feet to locate Culebra—1, Culebra—2 and the extension of the North West Vein. 80 feet of ore has been opened up on the North West Vein and a total of 464 feet of drift driven on the Culebra—1 and Culebra—2, most of which is in ore. See Vein Development for new tonnage.

Rosario

Lower 1150, Crosscut No. 1, was continued and driven an additional 213 feet and cut what appears to be the Rosario Vein. This vein was cut in Block 5 and directly under the ore shoot near the Lower 650 portal. At this point two samples showed small values — 4.3 feet, 3 oz. Ag. and 0.07 oz. Au. 1024 feet of vein that has been developed laterally on Drift No. 2 has given only one other sample, in Block 8, that showed any value, although this vein is strong, quartz-filled and oxidized. This last sample mentioned gave 14 oz. Ag. and 0.18 oz. Au. over a width of 1.0 foot. The vein is in shale and varies in width from 6 inches to 6 feet.

A crosscut driven 34 feet in Block 6 into the north or hanging wall, and a diamond drill hole driven horizontally from here for an additional 275 feet, revealed nothing but broken shale.

During 1949 Drift No. 2 will be driven to the projection of the Rosario Vein in Block No. 26, the next locality where the Rosario Vein is definitely known to exist on the L—650 level. This will require approximately 1100 feet of crosscutting. Also a crosscut will be driven in a southerly direction from Block 15 to determine if the Rosario Vein proper, or another vein, lies to the south of the drift No. 2.

Lower 650, Crosscut No. 41, was driven southwest from Block 42 to cut Culebra—1 and North West. At 235 feet a structure was cut that may be Culebra—1. 130 feet has been opened up laterally on this and 49 feet on what may be the North West, but so far there have been no values of importance. As soon as this drift on the supposed Culebra—1 has been advanced to a position below Raise No. 13 on the Lower 400 level, a crosscut will be started west to see if the downward extension of the Culebra—1 is in the west wall. Additional work will be actively pursued in this area during 1949.

Santa Fe

Lower 650 Santa Fe—2, Crosscut No. 36, was driven south along Diamond Drill Hole No. 29 to investigate values mentioned under this hole in last year's report. This crosscut was driven 142 feet without reaching the shale contact but cut a mineralized belt that has been named Santa Fe No. 5. A total lateral development of 384 feet on Drift No. 37 allows 1538 tons of 8 oz. Ag and .04 oz. Au., to be added to the reserves. It is proposed to continue this crosscut to the sedimentary contact early in 1949, thereby making this accessible to the Geological Party.

Lower 650 Santa Fe—2, Crosscut No. 39, was started from No. 3 Shaft Station in Block 88 and driven N—19°—E for a distance of 178 feet to cut any downward extension of San Benito—2 and Santa Fe—2, Branch—1. A vein was cut at 25 feet, 2.8 feet wide, showing 7 oz. Ag. and 0.07 oz. Au. which could be San Benito—2. At 60 feet another vein was cut dipping 67° to the north, 0.8 feet wide and assaying 235 oz. Ag. and 1.95 oz. Au. These veins will be developed during 1949.

Lower 500 Santa Fe—2, Crosscut No. 66, was started in Block 88 from Santa Fe No. 2 and driven south to prospect this area and to cut Santa Fe No. 5. At 23 feet a vein was cut that showed promise and was named Santa Fe No. 4. Although this vein had been cut on the Lower 400 and Lower 650 levels in the past it had not been developed pending an opportunity to use the low-grade development ore. A total of 692 feet has been opened up laterally on the Lower 500 level, practically all in good ore. The crosscut has been driven a total of 87 feet to date. This stringer will be called Santa Fe No. 6 in the future.

San Benito

Lower 650 San Benito—2, Crosscut No. 42: Drift No. 38 was driven 277 feet west to get under ore in the floor of the Lower 500 level. From this drift, in Block 101, Crosscut No. 42 was started N—20°—W to explore the area between San Benito —2 and Jucuara—2. This crosscut will be about 2500 feet long and will cut any possible westerly extension of Santa Fe—1, Independencia, San Blaz—1 and 2, Salvador, and the Jucuara Group. 339 feet have been driven to date.

Surface

Lempira Crosscut No. 1: At a point S—86°—E, and 2050 feet from Lower 400 Aguacatal portal, or on coordinates —3515N, and plus 6314 E, a crosscut has been started on bearing of S—41° —E to prospect this area known as "Cumbo Spur." A total of 36 feet has been driven, all of which is in shale.

Some 25 years ago a rich gold float sample was picked up in that region but surface exploration failed to disclose the source.

Additional Crosscuts

An additional 1584 feet of crosscuts were driven during the year in connection with regular mining operations.

Diamond Drilling

Hole No. 31

This hole was started from the north end of Lower 500 Santa Fe Crosscut No. 8 in Block 88 and driven north and down at an angle of —30° to the horizontal to prospect the area below the west end of the Independencia Vein. At collar + 118 feet a fracture was cut and from this point on no sludge was recovered. None of the sludge samples nor core showed any value. This hole was stopped at 600 feet.

Hole No. 32

At a point on the surface 2060 feet N—70°—E from L—400 Aguacatal portal, this hole was started and driven horizontally for 951 feet on a bearing S—28—E to prospect this spur. No stringers or veins were cut. All of the hole was in broken shale and became so heavy that the hole was discontinued before completion. The Lempira Crosscut, mentioned above, was started to complete this prospecting.

Hole No. 33

Lower 1150 Rosario, Drift No. 2: As it was doubtful that this vein was the Rosario Vein it was decided to prospect the region to the north to see if another vein existed. A short crosscut was driven north in Block 6 and this hole driven in a northerly direction from the face. At 275 feet it became too heavy to continue so was stopped. Nothing but broken shale was indicated by the core.

Hole No. 34

When Santa Fe—4 appeared so promising it was decided to drill a hole across the strike of the vein 500 feet to the east. This hole was started on the Lower 650 level in Block 81 south of O.P. No. 4 and driven southeast for 666 feet. A flow of water was encountered at 361 feet and beyond this point no sludge was recovered. None of the sludge samples showed values. Several indications of veins show in the core, but it was deemed inadvisable to split the core for samples as it was so small that the remaining pieces might be useless for reference. See General Exploration for 1949.

Hole No. 35

In Lower 650 Rosario, Block 36, Crosscut 22 to Rosario—2, a hole was started, bearing south at —60° to the horizontal to cut the Rosario Vein at the elevation of the Lower 1150 level to determine, for geological purposes, if the Lower 1150 is in shale at this point. At 120 feet a sludge sample showed 15 oz. silver and 0.20 oz. gold, which is probably the Candelaria Vein. This hole is now down 285 feet and should cut the Rosario Projection between 550 feet and 650 feet.

Apart from short exploration crosscuts in search of branch veins, and to gain access to old fills, the exploration program (in brief) for the immediate future may be summarized as follows:

Continued driving of Lower 1150 Rosario Drift No. 2 to Block 36 which is the location of an ore shoot on Lower 650. Another effort will be made to see if there is a parallel vein.

Lower 300 Colonia Crosscut No. 156 to Concepción will be continued.

Lower 400 Colonia Crosscut No. 14 to Rosario—2 with a north-south crosscut driven on location to be determined later.

Lower 200 Colonia Block 42 (mentioned last year). Crosscut to be driven to Lower 200 Nueva Block 37. This would not only cut any extensions of Colonia No. 2 and No. 3 and Nueva veins but also the downward projections of some known surface showings.

Lower 650 San Benito—2, Crosscut No. 42 to be continued.

Lower 300 Buena Ventura Block 53. Drive a crosscut southwest to explore the area betwen the Buena Ventura and South San Miguel and under the West Veins.

Lower 650 Esperanza Crosscut. It is proposed to continue this old Crosscut on Diamond Drill Hole No. 34 starting in Block 81 and driving on grade to connect with Drift No. 40 East on Santa Fe No. 4. This will serve, in addition to a motor haulage drift for Santa Fe—4, the cutting of any possible eastern extensions of Santa Fe—2 and San Benito—2 veins.

Vein Development and Stoping

Of the total of 199,747 tons of ore sent to the mill during 1948, 25,449 tons or 12.75% came from old fills; 19,543 tons or 9.80% from stopes not on Blocked Out Reserves, and 15,021 tons or 7.54% from development. This policy of taking as much ore from old fills and development as could be used profitably, reduced the tonnage taken from Blocked Out Reserves to 139,733 tons or 69.91% of the total.

Excluding old fills, the following veins supplied the greater part or approximately 69.25% of the ore — Colonia—1, Culebra—1, Culebra Stringer, Jucuara—1, 4 and 9, Salvador, San Benito—1 and 2, South West—1, Veta—4—South.

The balance of the tonnage or 30.75% was taken from the following veins — Carmen—1, Candelaria—1 and 2, Colonia—2 and 3, Culebra—2, Crisanta—1, Fortuna North, Guadalupe, Capitana—2, Independencia—1, Jucuara 2—3—7—8—12—13, North West—1 and 3, Nueva, Rosario, Rosario Stringer—1 and 2, San Blas—1, San Blas—2, Santa Fe 1—2—3—4—5, Santa Gertrudis—2, South San Miguel, San Miguel Stringer, San

Miguel—1, South West—7, Termopilas, Veta 4—North, West, and 56 Fault.

Number of veins worked during the year, 50.

Salvador Group

Salvador Vein

All efforts to develop additional ore on this vein were fruitless. Although a total of 16,013 tons were mined, 14,432 tons of 12 oz. silver and .04 oz. gold per ton remain on the Active Reserve.

Carmen Vein—1

The 400 tons of ore taken from this vein during the year were from development only. It is proposed to stope this vein during the year.

Fortuna North

Although part of this vein was stoped, development has replaced (most or all) of the ore taken from reserves, leaving 5828 tons of 15 oz. silver and .02 oz. gold on Active Reserves.

Jucuara—1 (Fortuna)

23, 713 tons were taken from this vein during the year (of which only 21 were from development). Only minor development was attempted and did not add to the reserves. It is proposed to mine this vein at about the same rate during 1949.

Independencia Group

Independencia—1

Development during the year produced 555 tons of ore and allowed 1752 tons of 11 oz. silver and .06 oz. gold to be added to the reserves. No stoping was attempted.

Independencia—4

Continued development of this vein produced a slight addition to the reserves. No stoping has been started yet.

San Blas—2

Stoping operations removed 951 tons from reserves and no development was attempted. During 1949 it is proposed to mine this vein at an increased rate.

Jucuara Group

Jucuara—2

This vein contributed only a minor amount to production, 3070 tons from stoping and 124 tons from development. Operations below the 650 level were not started until late in the year due to lack of delivery on equipment. When development was

finally resumed results were disappointing. This work is continuing. During 1949 it is proposed to diamond drill from the L-850 level for geological purposes as well as to see if ore can be cut at lower depth. This should give additional information for the L—1150 development program.

Jucuara—3

Development on the Upper 350 level produced a few tons of ore, but did not allow any additions to reserves. 3,887 tons were obtained from stoping operations.

Jucuara—4

This vein was actively stoped during the year and had no additions from development. A reserve of 20,432 tons of 19 oz. silver and .08 oz. gold remains.

Jucuara—7

This vein produced 2990 tons of ore from stopes, none of which was on blocked reserves.

Jucuara—8

Mining yielded 758 tons of ore, none of which was on blocked reserves.

Jucuara—9

This vein was actively mined during the year, producing 4132 tons, and is now exhausted.

Jucuara—12

766 tons of ore were taken from this vein without touching the blocked reserves, which remain the same.

Jucuara—13

This vein has been completely stoped this year, producing 2906 tons, of which 1569 were not on reserves. There seems to be very little chance of additional ore from it.

56 Fault

During the year this was actively stoped and no additions made to reserves.

Santa Fe Group

Santa Fe Main Vein

Although this vein was developed on the Lower 650 level, no increase to the blocked reserve was possible.

Santa Fe--1

Only 1398 tons of ore were stoped on this vein this year, all of which was not on reserve.

Santa Fe—2

1080 tons were taken from stopes this year. It is believed that a faulted block of this vein has been found on the Lower 650 level which should allow a small addition to the reserves during 1949.

Santa Fe—3

1577 tons were taken from stopes this year, of which 1431 were not on reserves.

Santa Fe—4

This vein has not been mentioned before, as it was found late in 1948, and lies just south of and nearly parallels Santa Fe—2. 450 feet on Lower 650, 692 feet on Lower 500 and 136 feet on Lower 400 of lateral development has allowed 54,368 tons of 17 oz. silver and .20 oz. gold to be added to the Active Reserves. The development of this vein is being pushed and should add more ore to the reserves during 1949. It is also proposed to sink No. 3 Shaft to the L--750 level for the purpose of developing the Santa Fe Group below the mill haulage level.

Santa Fe—5

This is not a vein but a mineralized belt the presence of which was indicated in Diamond Drill Holes Nos. 28 and 29 and opened up by Lower 650 Crosscut No. 36 and Drift No. 37 mentioned under Crosscuts. 1538 tons of 8 oz. silver and .04 oz. gold were blocked out.

San Benito—1

6133 tons were taken from this vein during the year and no new ore developed.

San Benito—2

During 1948 it was found necessary to mine this vein actively. 7196 tons were produced and no new ore added. A branch of this vein showing values has been cut on the Lower 650, but at the present time with no expectation of favorable results.

Colonia

Colonia—1

This vein was mined very extensively during the year, producing 20,794 tons of ore, and to obtain the grade of ore desired it will be necessary to mine it on the same scale during 1949.

Colonia—2

The reserves on this vein were mined out during the year, leaving only a small tonnage insufficient to be blocked out.

Crisanta—1

Stopes produced 2233 tons of ore during the year, leaving only 2862 tons of 8 oz. silver and .02 oz. gold on reserves. It is proposed to cut this vein on the U—350 level during the year.

Culebra

Culebra—1

6486 tons of stoping and 884 tons of development ore were produced by this vein during the year. Development on the Lower 400 was very satisfactory, revealing a narrow high-grade vein allowing an addition of approximately 5000 tons of 30 oz. silver and .18 oz. gold to reserves. Although no values have yet been found on the Lower 650 level, it is probable that considerable ore will be developed below the Lower 400 level during 1949.

Culebra—2

1913 tons of stoping and 723 tons of development ore were taken from this vein. Development on the L-400 level is showing good values, but not enough work has been done yet to give any indication of the prospects. Presence or absence of this vein on the Lower 650 level should be determined before the end of 1949.

Culebra Stringer

Mining on this vein was limited to stoping for the year and 9387 tons produced.

North West

North West 1 and 2

Work on these veins was limited to development, which produced 697 tons of ore and allowed 4393 tons of 6 oz. silver and .06 oz. gold ore to be added to blocked reserves.

West

A small amount of work was done on this vein to gain access for stoping.

Candelaria

Candelaria Branch—1

Produced 648 tons from stoping. No development was done and prospects are poor.

Candelaria Branch—2

Continued development of this vein produced 1421 tons of ore with an addition of 10,559 tons of 13 oz. silver and .06 oz. gold to reserves. Stoping operations will be commenced during the year. It now shows a total of 26,503 tons of 11 oz. silver and .06 oz. gold ore blocked out.

San Miguel South

Due to bad walls causing heavy dilution, this vein was stoped on a small scale and produced 1041 tons of ore. About 100 feet east of the San Miguel South and approximately parallel to it a vein is being opened up on the Upper 450 level. A few tons of ore have been developed, but not enough to date to allow any blocked out reserves on this new vein.

Rosario

Rosario Main Vein

This vein produced 2595 tons of ore from stopes. No new ore was developed and the future prospects look poor.

Rosario Stringer—1

1250 tons were produced from stoping and 1598 tons from development. A crosscut on the Upper 550 level located a faulted section of this vein and 608 feet of lateral development on the Upper 550, 114 feet on the Upper 350 level and 87 feet on the Upper 600 level has allowed an addition of 13,561 tons of 10 oz. silver and .04 oz. gold ore to the reserves. Development of this stringer will be continued in 1949.

Rosario Stringer—2

All known ore on this vein was taken out, a total of 79 tons, none of which was on reserves.

Southwest

Southwest—1

Continued development did not open up any additional ore and stoping operations accounted for practically all of the 8248 tons produced.

Veta—4 South

Veta—4 South was actively mined and produced 7892 tons of ore. Development on the Lower 400 was very disappointing and added nothing to the reserves. During 1949 the area between the Lower 400 and Lower 200 will be developed by means of raises from the Lower 400 to the Lower 300 and Lower 200 and a drift on the Lower 300 level. This should add something to the reserves.

Veta—4 North

This vein was also actively mined, producing 2843 tons of ore from stoping and 348 from development. As the Lower 400 Veta—4 South level was so disappointing it was stopped before reaching the Veta—4 North. Access to the probable ore in the floor of the Lower 200 level will be obtained by other means, possibly by drifting from the Lower 300 Veta—4 South.

Santa Gertrudis—2

The limits of this vein seem to have been reached in 1947 as the small amount of development in 1948 produced no new ore. A stope was started that produced 311 tons.

Guadalupe

This vein produced 685 tons of ore by stoping an area not on reserves.

Nueva and Nueva Branch—1

A study of this vein indicated a split or branch vein. Crosscuts (mentioned under Crosscuts) driven from the Lower 300 and Lower 400 Colonia proved this to be true. Although all the development ore was credited to the Nueva Vein in 1948, this year the ore is being blocked out separately on each vein, and has permitted the blocking out of 10,006 tons of 8 oz. silver and .16 oz. gold. Development will be continued in 1949, and additional low-grade ore can be expected.

Old Fills

The program of obtaining ore from the old fills was actively pursued during the year. A total of 25,449 tons of ore was obtained, showing an increase of 2,000 tons over 1947. There follows a detail of the source of this ore:

Candelaria	4161	tons
Colonia	647	"
Culebra	628	"
Guadalupe	3839	"
Nueva	1336	"
North West	1101	"
Rosario	3937	"
Salvador	1787	"
Santa Fe Main Vein	7195	"

Numerous other veins produced the balance.

Ore Production (Delivered to the Mill)

	1944	1945	1946	1947	1948
From Stopes & Old Fills (Tons)	167,263	167,970	178,873	174,110	184,726
From Development (Tons)	20,390	25,096	23,352	25,779	15,021
Total	187,653	193,066	202,225	199,889	199,747

General Mine Comments

Apart from the region south of Santa Fe—2 no new mineralized zones were found. Continued development of the branches and faulted segments of old veins, together with the development of Santa Fe—4, contributed practically all the new ore offsetting depletion.

The triangle of igneous rock, that lies between our principal Santa Fe workings of the past and the shale contact to the south, widens to the east presenting a considerable area favorable for new exploration, especially on the lower levels. As the Santa Fe—4 is developed eastward it will open that country for more economical and intensive exploration.

The Geological Study, just getting under way, will be of considerable assistance in planning new exploration, particularly south of the Santa Fe zone as well as in the partially unexplored zones west and north of the Jucuara Group.

The air compressing capacity is at present being increased by substituting a slightly larger compressor for one transferred to El Mochito.

The considerable reduction in Mine costs was obtained at the forced sacrifice of development on account of the limited supply of labor available. Providing the development program can be fully carried out this year, costs will rise correspondingly.

The Mill

Silver recovery fell below expectations. This is partially explained by having one of two agitators out of service for a considerable period while being replaced by new ones. The last remaining tube mill was also out of service for over a month to convert it to a ball mill to improve fine grinding. Toward the end of the year, however, trouble developed in inadequate classification, resulting in a coarser grind than normal. Experiments are being made to remedy this condition.

New Properties

Active work on the New Properties — *El Mochito* and *El Dorado* — has been continued during the year, and with fairly satisfying results. More could have been accomplished if an adequate labor supply were available. The latter is a condition that it is hoped may be remedied in 1949. At the same time it is believed that what has been accomplished thus far is an indication of favorable developments in respect to the future progress of these properties. This view we believe is supported by the production results during the periods of the year when the properties have been in actual operation — *El Mochito* since April 1st, 1948 and *El Dorado* since June 1st, of that year. There have been some interruptions during those periods, due to the usual experiences in the opening of new properties, augmented to an extent by the unusual delays which have affected many business enterprises in the post-war period. The following tables show in each case, what has been extracted from these properties during 1948, and the estimated reserves at the end of the year, and which estimates have been made on a conservative basis.

El Mochito

Production 1948

Tons Milled	Net Troy Ounces Recovered Ag.	Au.	Net Tons Lead
23,080	787,227.47	358,864	160.3979

Reserves January 1, 1949

Tons Ore Plus Waste	Troy Ounces Per Ton Ozs. Ag.	Ozs. Au.	Total Ounces Ag.	Au.	Per Cent Lead
124,721	36.906	.0226	4,602,953	2,819	2.24

El Dorado

Production 1948

Tons Milled	Net Troy Ounces Ag.	Au.
15,854	17,905	3,254

Reserves January 1, 1949

Tons Ore Plus Waste	Troy Ounces Per Ton Ag.	Au.	Total Ounces Ag.	Au.
118,506	.80	.26	90,975	31,108

Other Properties:

El Transito and Yuscaran

There is nothing additional to record from what was said in the report for 1947.

Company Staff

It is a great pleasure to attest to the loyalty of the Company Staff, and its cooperative spirit, in the handling of the new properties, and of my deep appreciation of the efforts of each individual member to promote the interests of the company. May I also acknowledge the helpful assistance of the departments of the New York Office in our work.

Respectfully submitted,

K. H. MATHESON,

General Manager.

ANNEX "A"—ACTIVE ORE RESERVES JANUARY 1, 1949

Estimated Reserves (13 & 14 Cu. Ft. Per Ton)	Avg. Vein	Width Waste	Feet Stope	Tons Ore & Waste	Avg. Troy Ozs. per ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Independencia Group								
Independencia—1	2.10	1.44	3.54	4,647	11	.06	49,287	264
Independencia—4	2.52	1.65	4.17	7,283	14	.05	103,302	361
San Blas—2	0.96	1.65	2.61	13,430	9	.08	126,515	1,054
Salvador Group								
Carmen—1	2.14	1.36	3.50	3,747	15	.05	55,647	206
Fortuna North	1.75	1.43	3.18	5,828	15	.02	85,890	100
Jucuara—1 (Fortuna)	2.27	1.65	3.92	51,412	19	.06	979,785	2,879
Salvador	1.34	1.89	3.23	14,432	12	.04	167,207	537
Jucuara Group								
Jucuara—2	2.66	1.64	4.30	21,811	13	.18	291,098	3,956
Jucuara—3	1.56	1.62	3.18	7,368	5	.10	39,367	717
Jucuara—4	1.47	1.97	3.44	20,432	19	.08	388,554	1,548
Jucuara—12	1.12	1.88	3.00	2,185	10	.07	22,032	147
56 Fault Vein	2.31	1.69	4.00	3,602	8	.08	29,278	289
Santa Fe Group								
Santa Fe Main	3.14	1.36	4.50	6,156	13	.06	77,063	385
Santa Fe—1	2.27	1.41	3.68	6,787	13	.18	89,354	1,211
Santa Fe—2	2.41	2.71	5.12	45,500	45	.43	2,030,568	19,467
Santa Fe—3	2.36	1.64	4.00	6,157	32	.36	198,893	2,214
Santa Fe—4	3.51	1.82	5.33	54,368	17	.20	946,547	10,670
Santa Fe—5	2.50	1.50	4.00	1,538	8	.04	14,430	67
San Benito—1	1.22	1.78	3.00	3,021	13	.12	38,106	356
San Benito—2	1.98	1.24	3.22	27,709	19	.24	526,700	6,642
Old Mine Group								
Candelaria, Branch 1	1.01	1.99	3.00	3,575	6	.06	20,125	229
Candelaria, Branch 2	1.28	1.72	3.00	26,503	11	.06	285,953	1,672
Capitana—1	0.76	2.24	3.00	6,102	5	.16	27,746	949
Capitana—2	1.14	1.36	2.50	3,709	5	.10	19,969	363
Catalina—2	1.34	1.66	3.00	9,018	16	.02	146,968	165
Colonio—1	1.31	2.02	3.33	34,512	11	.16	388,797	5,370
Colonia—3	1.57	1.43	3.00	4,590	10	.14	46,596	630
Crisanta—1	1.06	1.94	3.00	2,862	8	.02	23,657	55
Crisanta—2	0.68	2.32	3.00	5,313	11	.02	58,882	127
Culebra—1	1.80	1.56	3.36	16,761	18	.08	306,496	1,327
Culebra—2	1.79	1.35	3.04	15,085	17	.06	251,248	911
Culebra Stringer	1.80	1.41	3.21	15,464	13	.04	198,012	559
Esperanza	0.91	2.09	3.00	7,974	11	.03	87,372	232
Guadalupe	1.86	1.14	3.00	2,727	12	.09	33,415	255
North West—1	1.72	1.51	3.23	11,845	10	.10	117,618	1,236
North West—2	1.32	1.68	3.00	2,632	7	.08	19,405	219
North West—3	1.20	1.80	3.00	3,085	14	.13	44,725	389
Nueva	1.91	1.09	3.00	281	16	.20	4,633	55
Nueva Br. 1	1.10	2.14	3.24	10,066	8	.16	81,131	1,623
Porvenir	1.24	1.76	3.00	6,706	8	.02	56,656	140
Rosario—1	3.44	1.56	5.00	2,077	21	.07	42,870	143
Rosario—2	1.99	1.01	3.00	5,467	8	.10	41,894	545
Rosario Stringer—1	1.42	1.69	3.11	23,557	10	.04	238,004	1,028
San Joaquín	0.95	2.05	3.00	3,316	18	.24	58,492	793
South San Miguel	1.63	1.37	3.00	4,434	13	.05	56,307	215
South West—1	2.81	1.69	4.50	1,813	15	.05	27,479	92
South West—3	1.44	3.06	4.50	3,920	20	.04	78,203	142
South West—5	1.91	2.09	4.00	4,526	14	.03	65,307	143
Termopilas	1.20	1.30	2.50	942	7	.04	6,916	37
West	1.62	1.88	3.50	5,438	7	.14	40,294	745
Other Veins								
Santa Gertrudis—2	1.67	1.33	3.00	5,587	10	.03	55,750	166
Veta—4—N	1.73	1.50	3.23	21,677	12	.03	260,825	583
Veta—4—S	1.50	1.50	3.00	36,201	17	.03	602,867	968
TOTAL—Forward				615,178	16.34	.1222	10,054,235	75,176

Broken Ore in Stopes (21 Cu. Ft. Per Ton)

	Tons Ore & Waste	Avg. Troy Ozs. Per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
FORWARD	615,178	16.34	.1222	10,054,235	75,176
Candelaria	815				
Capitana—2	39				
Colonia	8,598				
Crisanta	101				
Crisanta—2	39				
Culebra Stringer	2,907				
Culebra—1	2,976				
Culebra—2	2,500				
Fortuna	53				
Jucuara—1	2,826				
Jucuara—2	107				
Jucuara—4	1,075				
Jucuara—12	261				
Jucuara—13	674				
Nueva	1,278				
Rosario	2,564				
Rosario Stringer	154				
Salvador	5,053				
San Benito—1	3,452				
San Benito—2	6,280				
San Blas—2	1,218				
San Miguel Stringer	213				
Santa Fe—1	160				
Santa Fe—2	1,824				
Santa Fe—3	8				
Santa Fe—4	24				
Santa Gertrudis—2	114				
Southwest—7	593				
Veta—4—North	1,838				
Veta—4—South	3,673				
Mine Ore Passes	1,389				
Mill Ore Bin	456				
	53,262	13.76	.0922	733,020	4,912
TOTAL ACTIVE RESERVE	668,440	16.14	.1198	10,787,255	80,088

ANNEX "B"
INACTIVE ORE RESERVES

Estimated Reserves (at 13 Cu. Ft. per Ton)	Avg. Vein	Width Waste	Feet Stope	Tons Ore & Waste	Avg. Ozs. Per Ton Ag.	Au.	Total Ozs. Ag.	Au.
Candelaria Main	1.50	1.78	3.28	5,097	6	.08	30,443	410
Culebra Stringer	1.46	1.45	2.91	6,398	7	.02	46,566	101
North San Miguel	1.60	1.90	3.50	1,831	12	.05	22,134	95
South San Miguel Str.	0.98	2.02	3.00	3,780	8	.05	32,110	185
Nueva	0.88	2.12	3.00	4,500	9	.09	40,468	401
Santa Fe Main	2.57	1.93	4.50	1,350	6	.02	7,710	31
Santa Fe—2	2.15	1.35	3.50	2,837	6	.06	16,400	165
Santa Gertrudis—1	1.32	2.18	3.50	1,562	11	.02	16,963	32
San Joaquín	1.23	1.77	3.00	6,458	7	.12	42,067	757
TOTAL				33,813	7.5	.064	254,861	2,177

Note on Reserves:

While it is inherently probable that the tonnages and grades, when actually mined from these individual veins, will vary somewhat from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

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NEW YORK AND HONDURAS ROSARIO MINING COMPANY

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SIXTY-NINTH ANNUAL REPORT

NINETEEN HUNDRED AND FORTY NINE

NEW YORK AND HONDURAS ROSARIO MINING COMPANY

OFFICERS

WM. A. PRENDERGAST, *President*
LEWIS L. CLARKE, *Chairman of Board* W. C. LANGLEY, *Treasurer*
RICHARD F. GOODWIN, *Vice-President* J. PERLMAN, *Secretary*
R. M. REININGER, *Acting Secretary*

BOARD OF DIRECTORS

LEWIS L. CLARKE, *Chairman*

JULIAN B. BEATY	W. C. LANGLEY
RICHARD F. GOODWIN	LESTER S. OPPENHEIMER
DR. J. RALPH JACOBY	WM. A. PRENDERGAST
HERBERT A. KAUFMANN	M. F. SOTO

RICHARD H. VALENTINE

EXECUTIVE COMMITTEE

LEWIS L. CLARKE, *Chairman*	R. F. GOODWIN
JULIAN B. BEATY	DR. J. RALPH JACOBY
M. F. SOTO	RICHARD H. VALENTINE

WM. A. PRENDERGAST, W. C. LANGLEY } *Ex Officio*

PRESIDENT'S REPORT

March 10, 1950.

To the Stockholders of the
New York and Honduras Rosario Mining Company:

Judged by all reasonable standards, the year 1949 has been a satisfactory one. Your Company has been the beneficiary of the generally favorable course of business during that period, and its continued happy relations with the Government and people of Honduras, which have extended over a period of sixty-nine years.

The expansion of our operations into El Salvador has also brought our Company into close relations with the Government and people of that Republic. We look forward to a long era of continued association with these Latin-American Nations.

Change in the Office of General Manager:

Mr. Kenneth H. Matheson resigned as General Manager of the Company's properties as of April 30, 1949. Mr. Matheson had been connected with the Company for thirty-five years, and had been General Manager since 1935. His record has been one of great credit, and he will continue to serve us in the capacity of Consulting Engineer.

Mr. Frank H. Stephens, who was appointed General Manager as of April 30, 1949, has been with us for twenty-three years, his most important positions during that period having been those of Mine Superintendent and Assistant General Manager.

General Manager's Report (Pages Nos. 11 to 38):

It is hoped that our Stockholders will earnestly review this report and especially those portions relating to the new properties, and the detailed statements of Reserves.

Geological Survey:

This work, since its inception January 1, 1949, has been actively pursued and will proceed until June of this year, in accordance with the original plan. As stated in my last report, it is intended to have a geologist as a permanent member of our staff.

Exploration Program:

By the end of 1949, the results of the Geological survey indicated the advisability of proceeding with a specific plan of exploration to determine the possibility of accessions of profitable ore bodies that would augment the life of the Rosario property. Such a plan has been devised and work upon it will be started as early as possible. The outlay will be approximately $300,000.00, spread over a period of three years, the anticipated outlay for this year being around $60,000.00.

Provision has been made, as you will see in the Consolidated Statement of Income and Surplus, for the cost of this work during 1950.

Earnings for 1949:

The following table shows the earnings of the different properties during the past year, after having (as already stated) made provision from those earnings of the sum of $60,000.00 for the Exploration Program:

	1949		1948	
	Earnings	Per Share	Earnings	Per Share
Rosario Mine	$503,844.69	$2.71	$588,000.10	$3.17
El Mochito Mine	105,146.22	.57	—0—	—0—
El Dorado Mine	4,033.56	.02	—0—	—0—
	$613,024.47	$3.30	$588,000.10	$3.17

Neptune Gold Mining Company:

On Page No. 39 of this Report you will find essential information regarding this Company. You were informed in my report for 1948, that we held $266,936.30 of the Ten Year 5% Notes of the Neptune Gold Mining Company, due March 1st, 1958, the total issue of which is $800,000.00. On February 27, 1950, notice was given to the holders of these Notes that 50% of the total amount would be paid at par with accrued interest on April 1st, 1950.

Respectfully submitted,

WM. A. PRENDERGAST,
President.

New York and Honduras Rosario

	ROSARIO
	Year Ended December 31, 1949
Number of men employed per working day	1,042
Tons of ore mined	179,416
Tons of ore milled	194,100
Average tons milled per day, full running time	567
Ounces of silver recovered	2,276,798
Number of ounces of silver recovered per ton of ore	11.73
Silver recovered — percentage	89.57 %
Sales value of silver recovered	$1,646,881
Average sales value of silver per ounce	$ .72
Average cost of silver per ounce (A)	$ .44
Average profit on silver per ounce (A)	$ .28
Average sales value of silver recovered per ton of ore	$ 8.48
Average cost of silver per ton of ore (A)	$ 5.18
Average profit on silver recovered per ton of ore (A)	$ 3.30
Ounces of gold recovered	15,278.93
Number of ounces of gold recovered per ton of ore	.079
Gold recovered — percentage	92.11 %
Sales value of gold recovered	$ 682,478
Average sales value of gold per ounce	$ 44.67
Average cost of gold per ounce (B)	
Average profit on gold per ounce (B)	
Average sales value of gold recovered per ton of ore	$ 3.52
Average cost of gold per ton of ore (B)	
Average profit on gold recovered per ton of ore (B)	
Ratio of gold to silver	1:149
Ratio of silver to gold	
Pounds of lead recovered	
Number of pounds of lead recovered per ton of ore	
Lead recovered — percentage	
Sales value of lead recovered	
Average sales value of lead per pound	

(A) After credit for sales value of gold and lead
(B) After credit for sales value of silver

TING STATISTICS

Mining Company and Subsidiary

MINE			EL MOCHITO MINE	EL DORADO MINE
Year Ended December 31, 1948	Increase (Decrease)		Year Ended December 31, 1949	Year Ended December 31, 1949
1,109	(67)		275	413
212,435	(33,019)		37,474	50,499
199,800	(5,700)		36,917	47,372
568	(1)		111	144
2,389,353	(112,555)		1,083,560	54,137
11.96	(.23)		29.35	1.14
90.23 %	(.66 %)		79.89 %	75.03 %
$1,769,076	($ 122,195)		$ 783,772	$ 39,215
$ .74	($ .02)		$ .72	$ .72
$ .41	$ .03		$ .45	
$ .33	($ .05)		$ .27	
$ 8.86	($ .38)		$ 21.23	$ .83
$ 4.93	$ .25		$ 13.29	
$ 3.93	($ .63)		$ 7.94	
13,305.18	1,973.75		661.63	11,396.12
.067	.012		.02	.24
94.23 %	(2.12 %)		80.98 %	87.30 %
$ 585,056	$ 97,422		$ 25,944	$ 508,739
$ 43.97	$ .70		$ 39.21	$ 44.64
				$ 38.80
				$ 5.84
$ 2.93	$ .59		$ .70	$ 10.74
				$ 9.33
				$ 1.41
1:180	(:031)		1:1638	
				4.75:1
			875,126	
			23.71	
			86.26 %	
			$ 102,722	
			$ .12	

STATEMENT OF CONSOLIDATED INCOME AND SURPLUS

New York and Honduras Rosario Mining Company and Subsidiary

Year ended December 31, 1949

Production of metals	$3,789,751.51	
Less freight and other expenses on metals	223,931.65	
OPERATING INCOME		$3,565,819.86
Operating expenses (including allowances for depreciation amounting to $284,952.33)		2,394,917.77
		$1,170,902.09
New York administrative and general expenses		166,175.73
		$1,004,726.36
Add income from investments, etc.		51,744.80
		$1,056,471.16
Less other deductions from income:		
Interest	$ 4,142.85	
Provision for cost of planned 1950 exploration program	60,000.00	
State and city taxes	6,272.53	
Sundry	3,915.42	74,330.80
		$ 982,140.36
Depletion		182,481.05
PROFIT BEFORE TAXES ON INCOME		$ 799,659.31
Taxes on income — estimated:		
Federal income taxes	$ 155,532.35	
Government of Honduras, C. A.	31,102.49	186,634.84
NET PROFIT		$ 613,024.47
Earned surplus — beginning of year		2,771,478.27
		$3,384,502.74
Cash dividends — $2.50 per share		464,080.00
Earned surplus — end of year		$2,920,422.74

See note to accompanying balance sheet.

MARKETABLE SECURITIES

New York and Honduras Rosario Mining Company and Subsidiary

December 31, 1949

	Par Value	Quoted Market Prices December 31, 1949	
UNITED STATES GOVERNMENT SECURITIES			
Treasury bonds: 2½% due December 15, 1972-67	$ 57,000.00	$ 58,858.20	
Savings bonds: 2½% Defense Series "G" due May 1, 1953	50,000.00	48,500.00	
2½% Defense Series "G" due January 1, 1955	100,000.00	95,800.00	$203,158.20
DOMESTIC RAILROAD BONDS			
New Orleans, Texas and Mexico Railway Co., 1st Mortgage 5½%. Series "A" due April 1, 1954	25,000.00	$ 25,281.25	25,281.25
STOCKS	No. of shares		
American Chicle Co., common stock, no par	1,200	53,400.00	
California Water Service Co., common stock, par value $25.00 per share	250	7,000.00	
The Home Insurance Co., New York, capital stock, par value $5.00 per share	1,000	34,750.00	
Indiana Gas and Water Co., Inc., common stock, par value $10.00 per share	90	1,732.50	
Iowa Southern Utilities Company of Delaware; common stock, par value $15.00 per share	1,500	27,375.00	
Public Service Co. of Indiana Inc., common stock, no par	500	13,500.00	
Standard Oil Co. of California, capital stock, no par	525	34,125.00	
Standard Oil Co. of New Jersey, capital stock, par value $25.00 per share	537	35,844.75	
Socony Vacuum Oil Co., capital stock, par value $15.00 per share	510	8,478.75	
San Jose Water Works, common stock, par value $25.00 per share	250	7,812.50	
Tide Water Power Co., common, no par value	3,000	24,375.00	248,393.50
			$476,832.95
OTHER INVESTMENT (at cost)			
Neptune Gold Mining Company ten year 5% note receivable due March 1, 1958, principal amount $266,936.30 and 5,610 shares of its capital stock of no par value — at cost			$269,557.70

CONSOLIDATED

New York and Honduras Rosario

DECEMBER

ASSETS

CURRENT ASSETS		
Cash		$ 443,756.44
Bullion at smelters and at mines—at realizable value less allowance for expenses		744,251.51
Marketable securities—at cost (aggregate quoted market $476,832.95) :		
United States Government obligations	$ 207,000.00	
Domestic corporation bonds	25,006.25	
Domestic corporation stocks	179,575.93	
	$ 411,582.18	
Interest accrued on bonds	1,861.46	413,443.64
Accounts receivable		111,159.20
Broken ore in stopes and mill bins — at cost		179,976.35
Inventories — materials and supplies — at purchased cost not in excess of replacement cost		992,193.75
TOTAL CURRENT ASSETS		$2,884,780.89
INVESTMENT		
Neptune Gold Mining Company, ten year 5% note receivable due March 1, 1958, principal amount $266,936.30 and 5,610 shares of its capital stock of no par value — at cost (see note)		269,557.70
PREPAID ITEMS, ETC.		
Inventories of supplies, prepaid insurance, taxes, and other expenses		94,711.59
BUILDINGS, MACHINERY, AND EQUIPMENT		
At cost	$4,023,729.23	
Less allowances for depreciation	2,404,935.55	1,618,793.68
MINES, REAL ESTATE, AND CONCESSIONS		
At valuation originally established in 1880 ($1,500,000.00), plus additions at cost	$1,957,432.17	
Less allowances for depletion	1,682,481.05	
	$ 274,951.12	
Development costs and expenses to date on new mining properties	291,914.68	566,865.80
		$5,434,709.66

NOTE—The Company's equity in the net assets of Neptune Gold Mining Company (as shown in its annual report for the year 1949) exceeds the cost of investment in note and stock by approximately $710,000.00 and the equity in its net income for the year was approximately $110,000.00. No dividends were received from that Company in 1949.

BALANCE SHEET

Mining Company and Subsidiary

31, 1949

LIABILITIES

CURRENT LIABILITIES

Accounts payable	$ 105,056.19
Drafts payable	31,573.72
Dividend payable — January 6, 1950	129,942.40
Accrued expenses	11,387.92
Federal and other taxes — estimated	247,849.81
Government of Honduras, C. A. tax for year 1949 — estimated	32,000.00
Provision for estimated cost of geological survey (unexpended portion) and for estimated cost of planned 1950 exploration program	100,156.88
TOTAL CURRENT LIABILITIES	$ 657,966.92

CAPITAL STOCK AND SURPLUS

Capital Stock (par value $10.00 per share)			
Authorized	188,367 shares	$1,883,670.00	
Less in treasury	2,735 shares	27,350.00	
Outstanding	185,632 shares	$1,856,320.00	
Earned Surplus		2,920,422.74	4,776,742.74
			$5,434,709.66

Report of Auditors

To the Stockholders of
New York and Honduras Rosario Mining Company:

We have examined the consolidated balance sheet of New York and Honduras Rosario Mining Company and subsidiary, as of December 31, 1949, and the related statement of consolidated income and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures, at offices in New York and at the Mines, as we considered necessary in the circumstances, including examination of Minutes of Stockholders and Directors meetings.

In our opinion, the accompanying balance sheet and statement of income and surplus present fairly the consolidated financial position of New York and Honduras Rosario Mining Company and subsidiary, at December 31, 1949, and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST

New York,
March 9, 1950

GENERAL MANAGER'S REPORT

January 1, 1950.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company
120 Broadway
New York, New York

Gentlemen:

We submit the following report covering the operating results of your properties in Central America during the fiscal year ending December 31, 1949.

THE ROSARIO MINE (HONDURAS)

Ore Reserves

Ore reserves are segregated into two groups. Those listed as Active Reserves, appearing in Annex "A", are based on silver at 70 cents and gold at $35.00 per troy ounce. Inactive Reserves, shown in Annex "B", cover silver and gold which are either not commercially usable at the present price or are not accessible until further mining operations have been completed.

Active Ore Reserves

	Tons Ore Plus Waste	Average Troy Ozs. per Ton Ag.	Au.	Total Troy Ozs. Per Ton Ag.	Au.
January 1, 1949	668,440	16.14	.1198	10,787,255	80,088
January 1, 1950	632,698	16.63	.1335	10,520,465	84,457
Decrease	35,742			266,790	
Increase		.49	.0137		4,369

Inactive Ore Reserves

January 1, 1949	33,813	7.50	.0640	254,861	2,177
January 1, 1950	28,426	8.47	.0787	240,909	2,238
Decrease	5,387			13,952	
Increase		.97	.0147		61

Due to two strikes of short duration, the mine was unable to keep production at the same rate as tons milled, resulting in a loss of 14,775 tons from the broken reserves. Barring unforeseen misfortunes, it is hoped to again build the broken reserves up to 50,000 tons during 1950.

The labor shortage has again affected all phases of exploration and development and serious thought must be given to encouraging more local men to become interested in the mining profession.

Exploration and Development

FOOTAGE DRIVEN

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet	Diamond Drilling
1948	11,673	6,565	4,472	22,710	3,047
1949	8,916	6,794	5,251	20,961	1,669
Decrease	2,757			1,749	1,378
Increase		229	779		

The diamond drilling program was suspended in September after drilling 1,669 feet or seven holes, awaiting the recommendations of the geological staff.

Exploration Crosscuts above the Peña Blanca Level

Upper 350 Jucuara No. 3, Block 83

This crosscut, mentioned in last year's report, was driven 80 feet north and 230 feet south over Jucuara No. 2 and Jucuara No. 3, and as nothing of interest was found, was abandoned.

Upper 150 Colonia Crosscut No. 25

This crosscut was driven 220 feet to the Nueva vein in Block No. 43 without cutting anything that represented the Nueva Branch No. 1 or Colonia No. 3 veins.

Exploration Crosscuts below the Peña Blanca Level

Colonia

Lower 300 Crosscut No. 156, which was started in 1948, was continued and driven 638 feet during the year. At a point 850 feet from the Colonia No. 1 vein a minor vein, carrying some value was cut. This vein will be referred to later as the Crisanta No. 3 vein. Plans are to continue Crosscut No. 156 in 1950.

Lower 400 Crosscut No. 14

This crosscut was continued and driven 696 feet during the year. This connected to the Rosario No. 2 vein without exposing anything of interest.

San Benito

Lower 650 Crosscut No. 42 was driven continuously during the year and advanced 991 feet. This crosscut is entirely in the sediments and although several small stringers have been cut, these show only spotty values with nothing of importance having been exposed. This work will be continued during 1950.

Santa Fe

Lower 650 Crosscut No. 36 was finished during the year. This was driven 242 feet and as it did not show anything of interest after passing from the dacite into the sediments, it was stopped.

Lempira

Lower 400 Crosscut No. 136 was driven as opportunity permitted and a total of 450 feet advance was accomplished. The crosscut has been in shale all the way with the exception of a dike of igneous rock about 6 feet thick. This work has been stopped awaiting further surface and geological information.

Rosario

During the year Drift No. 2 was advanced 815 feet on the Lower 1150 Level toward the projection of the ore shoot of the Rosario vein in Block No. 26 on the Lower 650 level. However, this still lacked 300 feet of reaching Block No. 26. In Block No. 15 the vein had become so irregular and weak that it was decided to abandon it and drive directly to the above mentioned projection. In Block No. 18 at Station 6406 plus 5 feet west this drift passed from the shale into igneous rock. In Block No. 16 a crosscut was driven south for a distance of 200 feet to prospect this area for a possible parallel vein and for the presence of any igneous contact. Thirty feet south of the drift the crosscut passed into igneous rock. However, after exposing only 150 feet of igneous rock it again passed into shale and work was suspended awaiting results of the geological staff's recommendations on diamond drill Holes No. 19 and No. 20.

Additional Crosscuts

An additional 2,232 feet of crosscuts were driven during the year in connection with regular mining operations, but are too numerous to mention.

Diamond Drilling

Hole No. 35

In Lower 650 Rosario, Block 36, Crosscut 22 to Rosario No. 2 a hole was started in 1948 bearing south at —60° to the horizontal, to cut the Rosario vein at the elevation of the Lower 1150 level and to determine if the Lower 1150 is in shale at this point. This hole was continued and finished during 1949.

At collar plus 118 feet a sludge sample showed 15 ounces silver and 0.20 ounces gold. A sludge sample taken at 298 feet gave 19 ounces silver and 0.12 ounces gold and another sample at 302 feet showed 15 ounces silver and 0.10 ounces gold. However, the source of the samples was doubtful so too much importance should not be attached to this. The hole did bottom in andesite at 660 feet and this was the principal information sought.

Hole No. 36

This hole was driven from the same location as hole No. 35 and in the same general direction in an effort to check the three samples showing values in hole No. 35. This it failed to do and was stopped at 320 feet.

Hole No. 37

At Lower 650 Santa Fe Crosscut, Block No. 83, this hole was driven S-25°-W at —33° to the horizontal to prospect the Santa Fe No. 4 at a vertical distance of 125 feet below the Lower 650 Level. Sludge samples from 100 to 120 feet showed values of 2 ounces silver and 0.04 ounces gold. A split core sample at 100 feet showed 0.6 feet of 10 ounce silver and 0.11 ounce gold and the core sample at 120 feet gave 1 foot of 7 ounce silver and 0.08 ounce gold. This hole was stopped at 329 feet.

Hole No. 38

As it was doubtful that the weak vein developed to the east on the Lower 850 was the Jucuara No. 2 vein proper, hole No. 38 was driven in Block No. 89 horizontally N-18°-E for 112 feet to determine the presence or absence of this vein. At 50 feet a vein was cut which has proved to be the main Jucuara No. 2.

Hole No. 39

Hole No. 39 was driven from the Lower 850 level Crosscut No. 3 South N-18°-E at —68° to the horizontal to prospect the Jucuara No. 2 vein below the 850 level, but as the rock is badly broken and drilling difficult, this was abandoned at 120 feet, before reaching its objective.

Hole No. 40

At the same location as hole No. 39, a second hole was started to prospect the Jucuara No. 2 vein below the Lower 850 level. This was driven N-18°-E but at —48° to the horizontal. As broken rock and considerable water was encountered making drilling difficult, this was stopped at 173 feet. A core sample taken at 172 feet showed 0.9 feet of vein that assayed 10 ounce silver and 0.04 ounce gold.

Hole No. 41

A third attempt was made to prospect the Jucuara No. 2 vein below the 850 level. Hole No. 41, therefore, was driven from Crosscut No. 1 North in Block No. 91 S-3°-W at —66° to the horizontal. As the rock was badly broken and so much water encountered, this hole was stopped at 237 feet without reaching its objective. Sludge samples taken from 112 feet to 120 feet averaged 8 ounces silver and .06 ounces gold per ton.

General Exploration Plan for the Year 1950

Apart from short exploration crosscuts in search of branch veins and for access to old fills, the exploration program, in brief, for the immediate future may be summarized as follows:

Continued driving of Lower 1150 Rosario Drift No. 2 to Block No. 26, which is the Lower 1150 projection of an ore shoot on the Lower 650 level.

Lower 300 Colonia Crosscut No. 156 to Concepción will be continued

Lower 400 Colonia: A North-South crosscut to be driven off Crosscut No. 14, exact location to be determined later.

Lower 200 Colonia, Block No. 42, mentioned last year: Crosscut to be driven to Lower 200 Nueva, Block No. 37. This would not only cut any extension of Colonia No. 2 and No. 3 and Nueva veins, but also the downward projections of some surface showings.

Lower 650 San Benito Crosscut No. 42 to be continued.

Lower 400 Santa Fe No. 4, Block No. 88, crosscut southwest to contact.

Lower 650 Esperanza Crosscut: Continue this crosscut to Santa Fe No. 4 for haulage purposes and to explore any eastern extension of the Santa Fe No. 2 and San Benito No. 2 veins.

Upper 150 Culebra, Block No. 48: Crosscut southwest to prospect Nothwest No. 3 vein at this horizon and any northern extension of Culebra No. 2 vein.

Lower 200 Nueva, Block No. 41: Crosscut south to Candelaria to explore any possible branches and also the lower extension of the Candelaria main vein.

Vein Development and Stoping

Of the total of 194,191 tons of ore sent to the mill during 1949, 19,312 tons or 9.95% came from old fills, 13,265 tons or 6.83% from stopes not on Blocked Out Reserves, and 23,159 tons or 11.92% from development. This policy of taking as much ore from old fills and development as could be used profitably, reduced the tonnage taken from Blocked Out Reserves to 138,455 tons or 71.30% of the total.

Excluding old fills, the following veins supplied the greater part or approximately 69.4% of the ore: Colonia No. 1, Culebra No. 1 and No. 2, Culebra stringer, Jucuara No. 1, No. 2 and No. 4, San Benito No. 2, Santa Fe No. 4, Salvador, Southwest No. 1, Veta 4 North and Veta 4 South.

The balance of the tonnage was taken from the following veins: Candelaria Branch No. 1 and No. 2, Capitana No. 2, Colonia No. 2 and No. 3, Crisanta No. 1, No. 2 and No. 3,

Fortuna, Fortuna North, Guadalupe, 56 Fault vein, Jucuara Nos. 3, 7, 8, 9, 12 and 13, Northwest No. 3, Nueva, Rosario, Rosario Stringer No. 1, San Benito No. 1, San Blas No. 2, Santa Fe Main Vein, Santa Fe Nos. 1, 2, 3 and 5, Santa Gertrudis No. 2, San Miguel South, San Miguel Stringer, Southwest No. 7, San Luis, Nueva Branch No. 1, Independencia, West, Carmen, Independencia No. 4, Northwest, Termópilas, and Porvenir.

The number of veins worked during the year was 55.

Salvador Group

Salvador Vein

During the year 12,118 tons of ore were removed from this vein, leaving 8,657 tons of 12 ounce silver and .04 ounce gold on Blocked Out Reserves. This vein which has been the largest producer in the Company's history, seems to have very little future left, but work on this vein will be continued to search out any branches or stringers for possible ore pockets.

Fortuna North

The 1,754 tons taken from this vein during the year were more than replaced by the exploration work done. There now remains 6,375 tons of 17 ounce silver and .02 ounce gold on Active Reserve and development work will be continued on this vein in 1950.

Jucuara No. 1 (Fortuna)

This vein produced 9,139 tons of ore during the year, of which 348 tons came from the exploration of a small hanging wall stringer. This exploration did not allow any new ore to be added to Blocked Out Reserves.

Independencia Group

Independencia No. 1

No development was attempted on this vein during the year. However, a small amount of stoping produced 899 tons.

Independencia No. 4

A minor amount of development has determined the lower limits of the ore in this vein. The addition by development work to Blocked Out Reserves did not offset the amount of ore taken from Reserves by stoping operations.

San Blas No. 2

This vein was stoped at an increased rate during the year with 2,265 tons of ore being removed. No development was attempted and there remains a reserve of 11,200 tons of 8 ounce silver and .07 ounce gold.

Jucuara Group

Jucuara No. 2

Production was increased during the year resulting in 7,717 tons of ore, with 852 tons coming from development. Pumping costs from the Lower 850 are high and it was deemed advisable to remove all ore below the Lower 650 level as quickly as possible so as to stop pumping at the earliest possible moment. The results of the diamond drill prospecting below the Lower 850 level were inconclusive, due to poor sludge and core returns. It is now proposed to sink the No. 6 shaft to the Lower 950 level to definitely prove or disprove the existence of ore on this vein below the Lower 850 level.

Jucuara No. 3

The only work on this vein during 1949 is represented by 2,525 tons extracted by stoping operations. There remains an unexplored block below the Lower 400 level and it is hoped to develop this during 1950.

Jucuara No. 4

This was again one of the largest producers for the year, although no new lateral work was attempted. Of the 8,278 tons removed, only 3,245 tons were taken from the Reserves. The difference of 5,033 tons is accounted for as follows: 1,075 tons from broken reserves and 3,958 tons from stringer veins off the active stopes

Jucuara No. 7

Work was continued on the outer fringes of this vein during the year. Although no reserve was carried, a total of 1,395 tons was extracted.

Jucuara No. 12

Only isolated pockets were mined on this vein during the year from which 1,257 tons were removed. None of the tonnage removed was on Active Reserve.

56 Fault Vein

Since the lateral and vertical extensions of this vein have been established there is little possibility for future addition to the reserve. It is proposed to mine the remaining 2,063 tons of 8 ounce silver and .09 ounce gold during the year.

Santa Fe Group

Santa Fe Main Vein

Re-opening of this old vein on the Lower 200 and Lower 450 during 1949 permitted the production of 1,634 tons of development ore. Further efforts will be made during the year to extend any favorable branches. Stoping of the existing blocks will be increased during the year.

Santa Fe No. 2

Stoping operations on this vein during the year were limited to a small tonnage of 2,758 tons. It is intended to mine only sufficient tonnage from this vein to keep control of the mill heads as this ore is of the highest grade in the mine. The Blocked Out Reserve now stands at 43,917 tons of 46 ounce silver and .45 ounce gold.

Santa Fe No. 3

It was necessary to mine the very high grade block of ore on the Lower 400 level during 1949 to maintain the grade of ore sent to the mill. Of the 5,873 tons mined, 2,532 remain as broken reserves

Santa Fe No. 4

This vein produced 11,886 tons of ore from development and 2,663 tons from stoping during the year. The western limit of this vein seems to have been determined on the Lower 300 and Lower 400 levels. However, there still remains a possibility of an extension to the west on the Lower 500 and Lower 650 levels. On the approximate horizon of the Lower 300 level the upper limits of the Santa Fe No. 4 are found a few feet within the sediments above the igneous-sedimentary contact. Here the vein fingers out and disappears. The Lower 300, Lower 400 and Lower 650 levels are being driven toward the eastern limit through irregular values, but the main body of the vein seems to have been fairly well outlined above the Lower 650 level. As fair values are found on the Lower 650 level, the No. 3 shaft has been sunk 126 feet to the Lower 775 level and a crosscut is now being driven to intersect the vein at this level. The following footage was driven during 1949: 183 feet of drifting on the Lower 300 level, 1,394 feet on the Lower 400, 766 feet on the Lower 500 and 1,073 feet on the Lower 650 level. Blocked Out Reserves have been increasel by 68,513 tons of 17 ounce silver and 0.20 ounce gold.

Santa Fe No. 5

This mineralized belt was developed on the Lower 650 level in 1948. In 1949 the Lower 500 Santa Fe Crosscut No. 68 was extended 251 feet to cut the upward extension of this vein. Nothing of value was exposed but all possibilities for further development have not been exhausted.

San Luis

This minor vein has not been mentioned for a number of years but circumstances forced another examination of it with the result that 249 tons of ore were produced. Although of no major importance, it is expected that further small pockets of ore will be developed on this vein.

San Benito No. 1

During stoping operations a hanging wall stringer was exposed which produced 631 tons from development and permitted an increase to the reserves of approximately 3,000 tons of better than 20 ounce silver per ton. Mining operations on this vein in 1950 will remain at approximately the same rate as in 1949.

San Benito No. 2

This vein was stoped at the same rate as last year. The second vein mentioned in last year's report under Crosscut No. 39 on the Lower 650 level has proved to be the downward extension of the San Benito No. 2 and 137 feet of development work has been done to the east of this crosscut. This has permitted blocking out the ore from the Lower 500 to the Lower 650 level. Further work on this vein is contemplated for 1950.

Old Mine Group

Candelaria Branch No. 2

This vein produced 2,585 tons of ore, all from stoping. No development was attempted during 1949. The Upper 350 level will be driven during 1950 and it is expected that some low grade ore will be added to the reserves.

Colonia No. 1

Again in 1949 it was found necessary to mine this vein extensively in order to obtain the grade of ore necessary to control the mill heads. 12,252 tons were produced, leaving 25,239 tons of 12 ounce silver and .18 ounce gold on reserve.

Colonia No. 3

This vein was prospected on the Upper 150 level by Crosscut No. 25 but no upward extension was found. Stoping operations resulted in 1,931 tons of ore and no ore was added by development work.

Crisanta No. 3

This vein, exposed by Lower 300 Colonia Crosscut No. 156, has been developed laterally for a distance of 337 feet on the Lower 300 level. It lies 850 feet to the west of and parallel to the Colonia No. 1 vein. Although a minor vein on which no ore could be blocked out, the Crisanta No. 3 produced 1,371 tons of ore during 1949 of which 407 tons were from stoping. It is expected that this vein will continue to produce minor amounts of ore.

Culebra No. 1

Delays in development work caused by hitting a heavy flow of water between the Lower 500 and Lower 650 level, prevented the exploration of this vein and the Culebra No. 2 below the Lower 400 level. Consequently no new ore has been added to Blocked Out Reserves. 8,255 tons were removed by stoping.

Culebra No. 2

Continued development of the Lower 400 level exposed a limited amount of irregular ore. This vein produced 5,743 tons of ore of which 784 came from development. Exploration of this vein below the Lower 400 level will be pursued during 1950.

Culebra Stringer

This vein was the second largest producer from stoping operations during 1949, accounting for 10,869 tons. Although the lateral and vertical extensions of this vein have been fairly well established, it can be expected that additional branches will be exposed during mining operations, extending the life of the vein.

Northwest No. 3

Development of this vein was actively pursued during the year, resulting in the following footage: 412 feet on the Lower 200, 450 feet on the Lower 300, and 210 feet on the Lower 500. This is a parallel vein to the Northwest vein system which was found during exploration on the Lower 400 during 1948 and has continued to give favorable results under development work. This vein now shows 11,986 tons of 15 ounce silver and .11 ounce gold per ton on Active Reserve.

Nueva Branch No. 1

Continued development of this vein exposed only minor amounts of low grade ore and the possibilities of developing further ore seem to have been exhausted. Stoping produced 1,520 tons of ore and development produced 739 tons.

Rosario Main Vein

This vein was depleted to a great extent during 1949 with 2,347 tons being removed from Broken Reserves. This leaves 2,096 tons of 18 ounce silver and .06 ounce gold on Blocked Out Reserves

Rosario Stringer No. 1

Continued development of this vein failed to expose any new ore, and prospects of developing any in the future are poor. Stoping operations contributed 2,670 tons of ore with 605 tons coming from development.

Southwest No. 1

All of the reserves on this vein were depleted during 1949. However, new exploration work will be started on the Lower 200, Lower 300 and Lower 400 levels during 1950 with reasonable assurance that additional ore will be found.

West

Minor stoping operations accounted for the 1,329 tons of ore produced, and no development was attempted. It is proposed to mine out all ore left on reserve during 1950, as this vein carries very low values and is in bad ground.

Other Veins

Santa Gertrudis No. 2

Operations on this vein were limited to stoping which produced 1,887 tons of ore, all from Blocked Out Reserves.

Veta 4 North

Stoping operations on this low grade vein were increased during 1949 and 9,231 tons were produced. It is proposed to mine out the remaining Blocked Out Reserves as quickly as possible as long as the price of silver remains favorable. During 1950 it is planned to continue development work between the Lower 200 and Lower 400 levels and additional tonnages of low grade ore can be expected from this work.

Veta 4 South

This vein was mined at the same rate as last year and 7,690 tons of ore were produced of which 7,370 tons were removed from Blocked Out Reserves. It is proposed to further explore this vein between the Lower 200 and Lower 400 levels during 1950 and it is believed that additional tonnages will be found.

Additional Veins Worked During 1949

The following veins not specifically mentioned above, produced a total of 12,333 tons: Capitana No 2, Crisanta No. 2, Fortuna, Guadalupe, Nueva Main, San Miguel Stringer, Crisanta, Termópilas, Porvenir, Colonia No. 2, Jucuara Nos. 8, 9, 13, Carmen, Santa Fe No. 1, Candelaria No. 1, Northwest No. 1, Southwest No. 7 and San Miguel South.

OLD FILLS

The program of obtaining as much ore as possible from old fills was pursued. A total of 19,312 tons was obtained which shows a decrease of 6,137 tons from the 1948 production. This

decrease was caused by the exhaustion of available sources. A program to gain access to new areas during 1950 has been started.

The major source of ore from old fills follows in detail:

Candelaria	2649 tons
Buena Ventura	661 "
Fortuna North	1441 "
Guadalupe	3622 "
Jucuara No. 2	951 "
Nueva	1699 "
Rosario Main	1981 "
Santa Fe No. 3	467 "
Santa Fe Main	3339 "
Salvador	1192 "
Veta 4 North	714 "

Numerous other veins produced the balance.

Ore Production (Delivered to the Mill)

	1944	1945	1946	1947	1948	1949
From Stopes & Old Fills	167,263	167,970	178,873	174,110	184,726	171,032
From Development	20,390	25,096	23,352	25,779	15,021	23,159
Total	187,653	193,066	202,225	199,889	199,747	194,191

General Mine Comments

No new ore bearing zones were discovered during 1949, but intensive development on the Santa Fe No. 4 and the Northwest No. 3, along with development of small branches of other veins, resulted in sufficient ore to maintain the reserves at practically the same figure as that of a year ago.

At the beginning of 1950 the only known possibilities that exist to offset the depletion to be incurred in 1950 are the Lower 775 level of the Santa Fe No.4, upper reaches of the Northwest No. 3 and the levels below the Lower 400 Culebra No. 1 and No. 2. This work will be given preference over all other development work.

The small increase per ton value of ore reserves is accounted for by conservative mining methods, satisfactory metal prices that existed during 1949, and the good grade of development ore from the Santa Fe No. 4. To hold the reserve at its present per ton value, the conservative policy followed during 1949 should be continued.

Concerted efforts will be made during 1950 to open up new sources of old fills to offset the ones depleted during 1949. New exploration on the outer fringes of the present ore body will be started during the year, combining diamond drilling with tunnel work.

Geological Survey

The detailed geological examination of the Rosario properties has been in progress since January 1, 1949. Approximately 34 miles of underground workings were mapped during 1949, giving a generalized picture of the geology of the productive area. In addition, the surface geology in the immediate vicinity of the mine has been outlined. This information has been recorded on permanent forty and two hundred scale office maps illustrating both in plan and cross section the geological relationships in the mining area. Microscopic studies have been of valuable aid in working out various critical relationships.

The geological studies progressed sufficiently during the year to justify preliminary diamond drilling recommendations in unprospected areas of considerable promise around the fringes of the mining area. As the geological studies are extended outwardly from the mine, other favorable areas may be localized.

The Mill

Silver recovery again fell below expectations. This is partially explained by inadequate classification and shortage of supervision. A new Dorr Classifier has now been installed which should solve the classification problem. Also to remedy this situation, in December a full time Mill Superintendent was engaged to take direct charge of the operations, giving the former Mill Superintendent sufficient time to carry out metallurgical tests on the ore from all of the properties and also to be free to visit the other properties for spot checkups.

The new Mineral Jig that was purchased during the year was installed in the tailings line at the Merrill presses for a check on the tails. Since the recovery was so low and the grade of concentrates so poor, the jig has been removed and is being installed in the No. 1 Ball Mill classifier circuit.

Nine days of operations were lost during 1949 due to labor trouble in April and October resulting in a decrease in tons milled during 1949 over 1948 of 5,700 tons. No labor troubles are expected in 1950 since good relations apparently exist now between the Company and its employees.

EL MOCHITO (HONDURAS)

Ore Reserves

The comparative summary of Active Ore Reserves, as of January 1, 1950 and as of January 1, 1949 based on 12.5 cubic feet per ton, appears immediately below:

Comparative Summary — Active Ore Reserves

	Tons of Ore plus Waste	Average Troy Ounces per ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1950	148,323	32.410	.0206	4,806,979	3,051
January 1, 1949	124,721	36.909	.0226	4,602,953	2,819
Increase	23,602			204,026	232
Decrease		4.499	.0020		

Comparative Summary — Inactive Ore Reserves

January 1, 1950	7,041	23.62	.0314	166,311	221
January 1, 1949	.....	.....	.....	.....	.....
Increase	7,041	23.62	.0314	166,311	221

The increase of 23,602 tons of ore and 204,026 ounces silver on the Active Reserve should be considered satisfactory, even though the grade has decreased 4.499 ounces silver per ton. The increase can be accounted for primarily by the development of the main ore body on the Lower 525 level.

The inactive ore carried on this year's report represents the small pipe of ore known as Prospect No. 14. Since this ore contains a high manganese content and the recovery is less than 60%, it has been deemed advisable to call this inactive.

Exploration and Development

FOOTAGE DRIVEN

Year	Headings Drifts & Crosscuts	Raises & Winzes	Total Feet	Diamond Drilling
1948	4,750	3,134	7,884	
1949	3,317	2,343	5,660	1,295
Decrease	1,433	791	2,224	
Increase				1,295

Zero Level

A total of 187 feet of drifts and 9 feet of crosscuts was done on this level, outlining the ore structure coming down from Prospect No. 14 or from Crosscut No. 8 of the Upper 50 level. Exploration work will be continued on this level during 1950.

Lower 150 Level

A total of 858 feet of crosscuts and 269 feet of raises was accomplished on this level during 1949.

Included in the above footages are the two exploration crosscuts No. 1 and No. 9 (D.W.) which are being driven on this level. Crosscut No. 1 was to cut the downward projection of No. 14 Prospect from the Upper 50 level and Crosscut No. 9 (D.W.) was to drive under surface prospect No. 2.

A raise from Crosscut No. 1, known as Raise No. 7, was driven to the Upper 50 level, cutting the pipe of ore on the Zero level and as stated under Zero level, 187 feet of drifting has been done to date and the face of the drift was in ore at the end of the year.

Crosscut No. 9 (D.W.) in order to get under No. 2 surface prospect has considerable distance to go but will be continued during 1950.

Lower 275 Level

All crosscutting and raising work done on this level was for operational purposes and amounted to 219 feet of crosscuts and 395 feet of raises.

Lower 400 Level

With the exception of Raise No. 14 which is a continuation of Raise No. 8 from the Lower 525 level, the crosscutting and raising work done on this level was preparatory to stoping operations. A total of 397 feet of crosscuts and 348 feet of raises was driven.

Lower 525 Level

The ore body on this level was located early in the year and in outlining this by right angle crosscutting and raises, a total of 1,946 feet of drifts and 895 feet of raises was accomplished.

The locating of ore on this level has permitted an increase in tons on Active Ore Reserves over January 1, 1949. Although this ore is highly oxidized and very spotty in values, it should average approximately 23 ounces silver per ton.

To help determine the size and shape of the ore body between the Lower 525 and Lower 400 levels and its downward extension below the Lower 525, twelve diamond drill holes totaling 1,295 feet were driven. The holes from the Lower 525 upward to the Lower 400 have materially helped in planning the stoping operations as fairly good results have been obtained from both sludge and core returns.

Downward holes No. 3, No. 6 and No. 14 have indicated that as large an ore body can be expected on the Lower 650 as the one on the Lower 525. The core samples have indicated that more sulphides and less oxides will be found at this horizon and also that the grade of ore will probably be less than 20 ounces of silver per ton.

Shaft to Lower 650

The shaft is now down 90 feet from the Lower 525 and should reach the Lower 650 level early in 1950. The crosscut from the shaft should enter the ore body not later than May, and this should allow sufficient time to establish the size and grade of the ore body before the end of 1950.

Outlying Ore Bodies

A number of outlying ore bodies too small to calculate in the Active Ore Reserves have helped considerably during 1949. These small ore bodies have supplied 8,805 tons of ore or 23.85% of the total milled, with the grade of ore averaging 20 ounces silver per ton.

General

Five additional mining claims have been denounced during the year to enlarge the holdings around Mochito and El Caliche.

An acute shortage of mine labor developed during December, which forced work to be suspended on the shaft as all available men were needed to keep up the ore production. It is hoped that this condition will be of short duration since much exploration work is planned for the near future.

Exploration Program for 1950

(1) To continue the shaft to the Lower 650 level and crosscut out to the main ore body.

(2) To start a shaft on the Caliche property near Adit No. 3 so as to prospect this area at a lower depth.

(3) To renew the development work that was started previously on the Caliche vein.

(4) To continue Crosscut No. 9 (D.W.) on the Lower 150 level to cut the downward projection of surface prospect No. 2.

(5) To increase the surface prospecting on all claims.

The Mill

The filters mentioned in last year's report were installed during 1949 in an effort to cut down on the dissolved value loss. The final tails continue to assay around 4 ounces silver per ton, but efforts will be made to improve this condition in 1950.

A Deister table was also installed in the flow sheet in 1949 so as to increase the recovery as much as possible before flotation and cyanidation.

Considerable trouble was experienced in 1949 with the recovery process due to ore of high manganese and oxide content found on the Lower 525 level. Laboratory tests will be continued to see if this situation can be remedied.

Costs remained high throughout 1949 due to changes made in the flow sheet in an effort to correct the recovery. However, it is believed that a reduction in cost can be achieved in 1950.

The Reduction Works for 1949 are as follows:

Dry tons Milled	Mill Head Oz. Ag.	Au.	% Pb.	Total Contents Ag.	Au.	Tons Pb.
36,917	36.739	.0221	4.198	1,356,289.82	816.983	1,549.9490

Total Production Ag.	Au.	Tons Pb.	Recovery Ag.	Au.	Pb.
1,138,137.51	709.797	494.6379	83.916%	86.880%	31.913%

Bullion and Concentrates Product

	Oz. Ag.	Au.	Tons Pb.
Jig & Table Concentrates	146,685.17	102.424	160.5474
Flotation Concentrates	551,416.24	293.844	334.0905
Bullion	440,036.10	313.529	.....
TOTALS	1,138,137.51	709.797	494.6379

Yuscaran

Only a skeleton force was employed at Yuscarán in 1949 in order to keep the mine workings open and provide the necessary maintenance to the property in general. The sum of $6,382.39 spent was primarily for labor, supplies, and taxes.

Transito

All necessary work was carried out on this property during 1949 so as to have it in condition for operational purposes on short notice.

A total of $2,526.08 spent was mostly for labor and taxes.

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Ore Reserves

The comparative summary of Active Ore Reserves, as of January 1, 1950 and as of January 1, 1949, appears immediately below:

Comparative Summary — Active Ore Reserves

	Tons of Ore plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1950	157,459	1	.25	160,309	39,511
January 1, 1949	105,334	1	.26	90,975	27,790
Increase	52,125			69,334	11,721
Decrease			.01		

Reserves are based on silver at 70 cents per troy ounce and gold at $35.00 per troy ounce.

The very satisfactory increase of 52,125 tons of ore, 69,334 ounces silver, and 11,721 ounces gold, is not to be attributed to the discovery of any new veins, but to the continued development on the lateral extension of the known ones.

Particular attention is called to the very attractive possibilities of the Zancudo and Minita veins. On each of these veins there is now approximately 1,500 feet of ore in the floor of the Lower 300 level and the North drifts were still in better than average grade ore at the end of the year.

Comparative Summary — Inactive Ore Reserves

	Tons of Ore plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1950	36,208	0.9	.22	32,192	8,052
January 1, 1949	13,272	....	.25	.....	3,318
Increase	22,936			32,192	4,734
Decrease			.03		

Comparative Summary—Active and Inactive Ore Reserves

	Tons of Ore plus Waste	Av. Troy Ounces Per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
Grand Total 1950	193,667	1.0	.25	192,501	47,563
Grand Total 1949	118,506	.8	.26	90,975	31,108
Increase	75,161	.2		101,526	16,455
Decrease			.01		

Note: Above tonnage for 1950 is figured on 14.5 cu. ft. per ton basis, whereas, previous years were based on 13 cu. ft. per ton.

Since the grade of ore has not come up to expectancy and cost per ton has increased due to inexperienced labor and high cost of supplies, it has been deemed necessary to increase the tons milled from 150 tons per day to 250. Orders have been placed for the additional equipment to increase the tonnage milled, and it is hoped that the installation will be completed by August 1, 1950

Exploration and Development

FOOTAGE DRIVEN

Year	Drifts	Cross-Cuts	Raises & Winzes	Total Feet
1948	2,898	1,216	1,415	5,529
1949	5,029	985	3,519	9,533
Decrease		231		
Increase	2,131		2,104	4,004

Exploration Crosscuts

30 Level Minita

Crosscut No. 1 was advanced 123 feet to the east to cut the Moreno Vein; at the end of the year the face was within 95 feet of the projection of this vein. Present plans call for stopping this crosscut at the Moreno Vein, but should the Crosscut No. 1 on the 175 Level cut veins of interest, the 30 level crosscut will be extended to cut the same veins.

Crosscut No. 2 was driven 46 feet east from the south end of the 30 Minita Drift 4 to connect with the Roque adit and to determine whether or not the Moreno vein actually lies to the west of the Roque.

175 Level Zancudo

At a point 35 feet north of station 151 a crosscut was driven 9 feet west to cut the extension of a branch of the Zancudo vein to the west of Drift No. 5. This crosscut is being driven, as fill is required in the stoping operations and will be driven a total of at least 100'. A crosscut was driven 35 feet east from a run-around in Drift No. 4 to determine whether or not the stringer cut by the run-around was the Zancudo vein; this crosscut has been discontinued.

175 Level Minita

A crosscut was started at a point 84 feet north of station No. 291 and was driven 20 feet east to cut a branch of the Minita Vein which entered the east wall 40 feet north of station 291. It is proposed to extend this crosscut at least 250 feet to cut the downward extension of a strong surface outcrop.

175 Crosscut No. 1

This crosscut was not advanced during 1949 but it is proposed to drive this tunnel as much as possible during 1950 when the waste rock thus derived can be utilized as fill.

Within the next 1,200 feet of crosscutting the following veins that have been opened up by surface work will be cut: Los Jobos, Rosario, Colonia, Veta Grande, and Cubías.

300 Level Crosscut No. 1

Crosscut No. 1 was driven a total of 252 feet cutting the Minita and Portillo veins, as well as a strong stringer between the two known as the Minita-2 Vein. It is not planned to continue this crosscut until after the 175 crosscut has been driven to the Cubías Vein.

Vein Development and Stoping

Of the total of 50,400 tons sent to the mill during 1949, 31,062 tons or 61.63% came from stoping operations and 19,338 tons or 38.37% came from development operations.

Nearly all ore produced came from the Dorado No. 1 Vein, Dorado No. 2 Vein, Zancudo, Minita, Portillo (No. 1 & No. 2) and Moreno Veins.

Dorado No. 1 Vein

This vein was actively stoped during 1949, a total of 8,870 tons were produced from Stopes while 4,787 tons were produced from Development operations.

During the year 309 feet of Drifts and 323 feet of Raises were driven on the 50 Level, 801 feet of Drifts, and 798 feet of Raises were driven on the 175 Level and 10 feet of drifting and 161 feet of raises were driven on the 300 Level.

It is proposed to stope the Dorado-1 Vein actively during 1950. The reserves for the Dorado No. 1 Vein were decreased by 6,939 tons, leaving 27,338 tons of 0.5 ounce silver and .19 ounce gold on Active Reserve.

Dorado No. 2 Vein

All of the 175 tons of ore produced from this vein during 1949 were from a development raise which was advanced 64 feet. Although good values were encountered, the vein was narrow and no ore was blocked out.

Zancudo Vein

Development operations on this vein were quite successful and produced 6,125 tons of development ore. Although 4,677 tons of ore were stoped, the reserves have been increased by 39,522 tons of ore averaging 1.3 ounces Ag. and .28 ounces Au. per ton. At this writing it appears that the south heading on the 300 Level (Drift No. 10) is on the same vein as that in Drift No. 2 on the 175 Level and in 1950 the latter vein will be considered part of the Zancudo. The 30 Level was advanced 43 feet. On the 175 Level 448 feet of drifts and 355 feet of raises were driven, and 1,116 feet of drifts and 544 feet of raises were driven on the 300 Level.

Minita Vein

During 1949 the Minita Vein continued to be the major producer of ore both from development and stoping operations. Although the south headings on this vein on all levels were in waste at the end of the year, it is not believed that the southernmost limit of the ore has been reached and these headings will be extended during the coming year.

A total of 483 feet of drifts and 108 feet of raises were driven on the 30 Level, 695 feet of drifts and 787 feet of raises were driven on the 175 Level, and 701 feet of drifts and 379 feet of raises were driven on the 300 Level. A total of 17,515 tons were produced from stoping operations while 7,295 tons were produced from development operations, leaving 71,690 tons of 1.0 ounce silver and .26 ounce gold on Active Reserve.

Minita 2

This vein was cut by Crosscut No. 1 on the 300 Level and was marked by slab rounds. Although the vein was well defined, values were low, so work was suspended until the waste can be utilized for fill. No ore was produced.

Moreno Vein

A total of 849 tons of ore were produced from development operations on this vein on the 30 and 175 Levels. Near the end of 1949, the development work on this vein was suspended on the 30 Level because of the low-grade ore and high amount of slimes in the ore. Some drifting was done on the Lower 175 Level where this vein served as a source of calcite for the lime kilns. It is not planned to drive the 30 Level until the mill has been enlarged. Although some ore has been encountered on the 30 Level, no reserves have been blocked out to date. Totals of 182 feet and 67 feet of drifts were driven on the 30 and 175 Levels respectively.

Portillo No. 1

The 92 tons of ore produced from this vein were from development operations on the 300 Level. At the end of the year, insufficient work had been done on this vein to block out reserves although two fairly promising veins have been cut on the 300 Level. Thirty-one feet of drifts were driven on the above stringers.

General

It is not proposed to start work on the Lower 425 Level this year, although as mentioned in last year's report the shaft is down to this level and the station has been cut. It is believed that the exploration and development work required on the Lower 175 and Lower 300 will be more than can be accomplished during 1950

Should the lateral development on the Lower 175 and Lower 300 not come up to expectations, preparations will be made to start work on the Lower 425 Level at the beginning of the next dry season and pumping equipment will be ordered the latter part of this year.

A shortage of capable mine labor continues to exist and this constitutes the greatest problem at the mine today. However, every effort will be made to convert the surplus construction force into miners once the new additions to the mill have been completed. Despite the labor shortage, the mill additions are being pushed forward in order that the tonnage milled may be increased from 150 to 250 tons daily before the end of the year.

Exploration Program for 1950

(1) To continue crosscut No. 1 on the Lower 175 Level to the Cubías vein if possible.

(2) To drive a short crosscut west from Lower 175 Zancudo vein north drift to see if a parallel vein exists.

(3) To drive a short crosscut east from Lower 300 Zancudo vein north to the Minita No. 1 vein to see if a parallel vein exists since the Lower 300 vein does not project to the Lower 175 nor the Lower 175 down to the Lower 300.

(4) To drive a crosscut east from Lower 175 Minita north drift Station 291 plus 84 feet north to cut the downward extension of several surface showings.

(5) To continue lateral development as far as possible on all veins on the Lower 175 and Lower 300 Levels.

The Mill

The classifier mentioned in last year's report was installed the first part of the year. This enabled an increase in tons milled to 150 daily, beginning in June and continuing at this rate the remainder of the year.

Difficulty was encountered in breaking in competent mill laboratory men, and the metallurgical reports for 1949 herewith submitted, are the best obtainable under these conditions.

Dry Tons Milled	Mill Head Ag.	Mill Head Au.	Total Contents Ag.	Total Contents Au.	Total Production Ag.	Total Production Au.
47,372	1.523	.2756	72,151	13,054	54,238	11,384

Recovery Ag.	Recovery Au.
75.172%	87.2016%

During the year an additional primary thickener and agitator tank were installed in an effort to increase the recovery of both silver and gold and since this did not give the desired results, batch agitation was started in December. The results to date are very encouraging and therefore this type of agitation will be continued.

Costs

Costs have gradually come down during the year as tonnage increased and with the mine and mill laborers becoming more efficient in their work.

It is hoped to reach an operating cost of $6.00 to $6.50 per ton by the end of the year or once the tons milled reach 250 daily. Mill heads for 1950 should average .27 ounces gold per ton. Gold recovery should reach 90% during the year and silver recovery should increase once the new additions to the mill are completed, giving more agitator and thickener capacity.

During the year two additional lime kilns were installed and lime is being furnished from the mine calcite. Besides providing a better grade lime than previously supplied and at a reduction of approximately 50% in cost, this calcite carries a gold value of from $3.00 to $5.00 per ton which could not be mined otherwise due to the low gold content in the ore.

Tonnage Mined

Previous to January 1, 1950

Veins	Total Including Stoping & Development, previous to December 31, 1948	Total including Stoping & Development for the year 1949	Grand Total including Stoping & Development January 1, 1950
Dorado No. 1	5,380	13,657	19,037
Dorado No. 2	152	175	327
Dorado No. 3	349	.....	349
Minita No. 1	7,118	24,810	31,928
Moreno	208	849	1,057
Portillo No. 1	8	92	100
Portillo No. 2	62	.....	62
Potrero	159	.....	159
Zancudo No. 1	2,565	10,802	13,367
Zancudo No. 2	284	15	299
TOTALS	16,285	50,400	66,685

Summary

To January 1, 1950

From Stoping	33,538
From Development	33,147
TOTAL	66,685

Conclusion

It is with great pleasure that I commend the loyalty and cooperation of all the members of the staff at Rosario, Mochito and Dorado. They have exerted their time and energy to the very best advantage and have truly been of much assistance to me in my first year as Manager. I also wish to acknowledge the untiring cooperation and assistance of the Officers of the Company, the Board of Directors, and all departments of the New York Office.

Respectfully submitted,

F. H. STEPHENS

General Manager.

ANNEX "A"—ACTIVE ORE RESERVES JANUARY 1, 1950

Estimated Reserves (13 & 14 Cu. Ft. Per Ton)	Avg. Vein	Width Waste	Feet Stope	Tons Ore & Waste	Avg. Troy Ozs. per ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Independencia Group								
Independencia—1	2.14	1.41	3.55	3,651	11	.04	39,243	158
Independencia—4	2.27	1.62	3.89	5,041	17	.05	84,216	275
San Blas—2	0.95	1.85	2.80	11,200	8	.07	87,691	826
Salvador Group								
Fortuna North	1.73	1.35	3.08	6,375	17	.02	109,142	120
Jucuara—1 (Fortuna)	2.31	1.62	3.93	45,940	20	.06	936,686	2,670
Salvador	1.37	1.88	3.25	8,657	12	.04	100,371	320
Jucuara Group								
56 Fault Vein	2.40	1.85	4.25	2,063	8	.09	17,344	179
Jucuara—2	2.79	1.51	4.30	19,444	11	.14	219,770	2,645
Jucuara—3	1.61	1.73	3.34	6,245	5	.10	30,269	603
Jucuara—4	1.53	2.03	3.56	17,187	21	.08	356,474	1,373
Jucuara—12	1.12	1.88	3.00	2,185	10	.07	22,032	147
Santa Fe Group								
San Benito—1	1.22	1.78	3.00	4,021	16	.17	63,648	687
San Benito—2	1.86	1.22	3.08	26,704	19	.24	498,398	6,295
Santa Fe Main	3.12	1.12	4.24	5,912	11	.05	65,661	314
Santa Fe—1	2.18	1.48	3.66	6,709	12	.16	78,105	1,104
Santa Fe—2	2.45	2.70	5.15	43,917	46	.45	2,035,634	19,608
Santa Fe—3	2.89	1.11	4.00	1,663	15	.13	25,452	223
Santa Fe—4	3.20	1.76	4.96	122,881	17	.20	2,116,130	24,158
Santa Fe—5	2.47	1.53	4.00	1,415	11	.05	14,858	70
Old Mine Group								
Candelaria Branch—1	1.18	1.82	3.00	2,031	6	.07	11,985	144
Candelaria Branch—2	1.21	1.79	3.00	21,764	10	.06	209,963	1,311
Capitana—1	0.76	2.24	3.00	6,102	5	.16	27,746	949
Capitana—2	1.14	1.36	2.50	3,709	5	.10	19,969	363
Catalina—2	1.36	1.64	3.00	8,949	16	.02	145,420	163
Colonia—1	1.45	1.92	3.37	25,239	12	.18	304,033	4,665
Colonia—3	1.51	1.49	3.00	1,121	7	.10	7,900	107
Crisanta—1	1.06	1.94	3.00	2,862	8	.02	23,657	55
Crisanta—2	0.68	2.32	3.00	5,313	11	.02	58,882	127
Culebra—1	1.67	1.67	3.34	9,308	16	.08	150,564	713
Culebra—2	1.69	1.38	3.07	12,776	17	.05	217,160	712
Culebra Stringer	1.53	1.53	3.06	8,807	10	.03	92,443	222
Esperanza	0.91	2.09	3.00	7,974	11	.03	87,372	232
Guadalupe	1.86	1.14	3.00	2,727	12	.09	33,415	255
Northwest—1	1.65	1.56	3.21	13,290	10	.11	132,476	1,412
Northwest—2	1.32	1.68	3.00	2,632	7	.08	19,405	219
Northwest—3	1.36	1.64	3.00	11,986	15	.11	179,839	1,261
Nueva	1.91	1.09	3.00	281	16	.20	4,633	55
Nueva Branch—1	1.37	1.89	3.26	7,550	8	.15	59,630	1,155
Porvenir	1.24	1.76	3.00	6,706	8	.02	56,656	140
Rosario—1	3.29	1.71	5.00	2,096	18	.06	38,612	124
Rosario—2	1.99	1.01	3.00	5,467	8	.10	41,894	545
Rosario Stringer—1	1.36	1.69	3.05	18,496	11	.05	204,604	865
San Joaquin	0.95	2.05	3.00	3,316	18	.24	58,492	793
South San Miguel	1.55	1.45	3.00	4,202	13	.05	52,770	205
Southwest—3	1.44	3.06	4.50	3,920	20	.04	78,203	142
Southwest—5	1.91	2.09	4.00	4,526	14	.03	65,307	143
Termopilas	1.20	1.30	2.50	923	7	.04	6,778	36
West	1.64	1.86	3.50	4,846	8	.14	39,455	662
Other Veins								
Santa Gertrudis—2	1.56	1.44	3.00	3,339	10	.03	32,080	113
Veta—4 North	1.49	1.53	3.02	9,252	11	.02	101,389	230
Veta—4 South	1.49	1.51	3.00	31,401	17	.03	526,940	815
TOTAL				594,121	16.81	.1360	9,989,796	80,708

ANNEX "A"—ACTIVE ORE RESERVES JANUARY 1, 1950

Broken Ore in Stopes — 21 Cu. Ft. Per Ton

VEINS	Tons Ore Plus Waste
Catalina—2	53
Colonia—1	4,716
Colonia—3	1,191
Crisanta—3	250
Culebra—1	3,719
Culebra—2	360
Culebra Stringer	2,070
Jucuara—1	4,073
Northwest—1	249
Northwest—3	71
Rosario	234
Rosario Stringer—1	522
Salvador	2,017
San Benito—1	4,859
San Benito—2	74
San Blas—2	1,943
Santa Fe Main	210
Santa Fe—1	497
Santa Fe—2	652
Santa Fe—3	2,523
Santa Fe—4	1,339
Santa Fe—5	111
Veta—4 North	2,377
Veta—4 South	2,552
Mine Ore Passes	1,369
Mill Ore Bin	546
TOTAL	38,577

Estimated Ore—	Tons Ore & Waste	Avg. Troy Oz. Per Ton Ag.	Au.	Total Troy Oz. Ag.	Au.
(At 13 & 14 cu. ft. per ton)	594,121	16.81	.1360	9,989,810	80,819
Broken Ore (At 21 cu. ft. per ton)	38,577	13.76	.0943	530,655	3,638
TOTAL ACTIVE RESERVE	632,698	16.63	.1335	10,520,465	84,457

ANNEX "B"—INACTIVE ORE RESERVES

Estimated Reserves at 13 cu. ft. per ton

(At 13 cu. ft. per ton)	Avg. Vein	Width Waste	Feet Stope	Tons Ore & Waste	Avg. Ozs. per Ton Ag.	Au.	Total Ozs. Ag.	Au.
Candelaria Main	1.49	1.78	3.27	4,943	6	.08	29,430	397
Culebra Stringer	1.26	1.24	2.50	931	6	.02	5,628	19
Nueva	0.88	2.12	3.00	4,500	9	.09	40,468	401
Salvador	1.24	1.76	3.00	1,652	22	.14	36,199	239
Santa Gertrudis—1	1.32	2.18	3.50	1,562	11	.02	16,963	32
San Joaquin	1.23	1.77	3.00	6,458	7	.12	42,067	757
North San Miguel	1.60	1.90	3.50	1,831	12	.05	22,134	95
South San Miguel Str.	0.98	2.02	3.00	3,780	8	.05	32,110	185
Santa Fe Main	2.57	1.93	4.50	1,350	6	.02	7,710	31
Santa Fe—2	2.15	1.35	3.50	1,419	6	.06	8,200	82
TOTAL				28,426	8.47	.0787	240,909	2,238

Note on Reserves:

While it is inherently probable that the tonnages and grades, when actually mined from these individual veins, will vary somewhat from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

Annex "C"—Tonnage Mined From October 1, 1907 to January 1, 1950

Veins	Total Incl. Stoping, Devel. and Fill Oct. 1, 1907—Dec. 31, 1948	Total Incl. Stoping, Devel. and Fill Year 1949	Grand Total Including Stoping, Devel. and Fill To January 1, 1950
Buena Ventura	101,455	----	101,455
Candelaria Group	173,854	4,270	178,124
Capitana—1	60,967	----	60,967
Capitana—2	1,198	12	1,210
Carmen—1	64,916	1,989	66,905
Carmen—2	2,470	----	2,470
Catalina—1	6,587	----	6,587
Catalina—2	5,201	----	5,201
Colonia—1	153,571	12,252	165,823
Colonia—2	1,810	407	2,217
Colonia—3	528	1,931	2,459
Concepcion	19,342	----	19,342
Crisanta—1	18,751	6	18,757
Crisanta—2	141	294	435
Crisanta—3	----	1,371	1,371
Culebra—1	136,739	8,337	145,076
Culebra—2	24,419	5,743	30,162
Culebra Stringer	44,987	10,869	55,856
Esperanza	8,710	----	8,710
Fortuna Group	110,854	370	111,224
Guadalupe	63,137	151	63,288
Independencia	309,661	3,388	313,049
Jucuara—1 (Fortuna)	502,694	9,139	511,833
Jucuara—2	360,973	7,717	368,690
Jucuara—3	52,856	2,524	55,380
Jucuara—4	83,938	8,285	92,223
Jucuara—5	3,054	----	3,054
Jucuara—6	4,541	----	4,541
Jucuara—7	6,318	1,395	7,713
Jucuara—8	8,386	176	8,562
Jucuara—9	35,710	880	36,590
Jucuara—10	4,558	----	4,558
Jucuara—12	1,114	1,257	2,371
Jucuara—13	5,791	769	6,560
56 Fault Vein	10,161	2,289	12,450
North	4,647	----	4,647
North West Group	101,229	3,021	104,250
Nueva Group	33,187	3,629	36,816
Porvenir	2,985	127	3,112
Rosario Main	159,460	2,374	161,834
Rosario—2	641	----	641
Rosario Stringer—1	4,049	3,275	7,324
Rosario Stringer—2	2,993	----	2,993
Salvador	820,360	10,926	831,286
San Benito—1	143,508	2,196	145,704
San Benito—2	45,300	7,809	53,109
San Blas—1	9,083	----	9,083
San Blas—2	20,465	2,265	22,730
San Joaquin	71,649	----	71,649

Annex "C"—Tonnage Mined From October 1, 1907 to January 1, 1950

Veins	Total Incl. Stoping, Devel. and Fill Oct. 1, 1907—Dec. 31, 1948	Total Incl. Stoping, Devel. and Fill Year 1949	Grand Total Including Stoping, Devel. and Fill To January 1, 1950
San Luis	2,389	224	2,613
San Miguel North	176,157	----	176,157
San Miguel South Group	145,984	1,458	147,442
San Vicente	1,289	----	1,289
Santa Fe Main	190,907	2,762	193,669
Santa Fe—1	82,290	1,238	83,528
Santa Fe—2	96,254	2,758	99,012
Santa Fe—3	49,216	3,350	52,566
Santa Fe—4	4,030	14,549	18,579
Santa Fe—5	713	403	1,116
Santa Gertrudis—1	78,576	----	78,576
Santa Gertrudis—2	3,681	1,887	5,568
Socorro	22,592	----	22,592
South West—1	135,156	5,862	141,018
South West—2	26,483	----	26,483
South West—3	14,104	----	14,104
South West—4	10,237	----	10,237
South West—5	25,261	----	25,261
South West—6	10,083	----	10,083
South West—7	9,206	598	9,804
South West—8	581	----	581
South West—9	6	----	6
South West—10	14,113	----	14,113
South West—11	600	----	600
South West—12	2,737	----	2,737
Termopilas	13,105	97	13,202
West	97,420	1,329	98,749
Veta 4 North	17,774	9,231	27,005
Veta 4 South	28,785	7,690	36,475
Ore from Development	63,599	----	63,599
Miscellaneous (Fills)	73,371	19,312	92,683
TOTALS	5,205,647	194,191	5,399,838

NEPTUNE GOLD MINING COMPANY

Significant Facts from the Annual Report for the Year 1949

Most of the repair work at the Siempre Viva hydro electric power plant was completed during 1948 so that the plant could operate continuously. This work was entirely completed during 1949. In addition, the height of the dam was raised to give increased water storage. It is to be hoped that this will enable the plant to operate throughout the dry season each year without interruption due to shortage of water. During 1949 operations were affected seriously during two months on account of lack of power.

During 1949, 9,878 feet of development work were accomplished in the Bonanza group of mines, of which 5,763 feet, or 58.3 percent were in ore. In addition, 4,587 feet of diamond drilling were completed.

Production figures for the Bonanza group for the year 1949 compared with 1948 are:

Year	Tons Milled	Average Ozs. Gold per Ton	Contents of Bullion Produced and Shipped Ozs. Gold	Ozs. Silver
1948	251,767	0.266	61,034	78,792
1949	252,560	0.288	66,112	83,713

In the Bonanza and Constancia group of mines the estimated total of assured, probable and prospective ore as of December 31, 1949 is 1,237,800 tons, averaging 0.30 ounces gold per ton.

At the property of the Compania Minas Matagalpa, operated under a profit sharing agreement under which that company receives 30 percent of the profits, 37,505 tons of ore were milled, assaying 0.197 ounces gold per ton. There were produced and shipped in the form of bullion 6,231 ounces gold and 8,557 ounces silver. Ore reserves at Matagalpa as of December 31, 1949 were 89,100 tons, averaging 0.218 ounces gold per ton.

Both at Bonanza and at Matagalpa, operating costs increased due to higher cost of labor, freight and supplies.

> In the report for 1948 it was stated that construction of an aerial tramway to connect the Constancia Mine with the Neptune Mill had been started. This tramway was completed and placed in operation on June 1, 1949."

The earnings from mine operations of the Company for the year 1949 before income charges and provisions for depreciation and depletion were $759,801.88. Of this amount, $706,604.37 was earned at the Bonanza group of mines, and the balance of $53,197.51 at Matagalpa.

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JUN 27 1952

NEW YORK AND HONDURAS ROSARIO MINING COMPANY



SEVENTIETH ANNUAL REPORT

NINETEEN HUNDRED AND FIFTY

NEW YORK AND HONDURAS ROSARIO MINING COMPANY

OFFICERS

WM. A. PRENDERGAST, *President*
RICHARD F. GOODWIN, *Vice-President*
W. C. LANGLEY, *Treasurer*
J. PERLMAN, *Secretary*
R. M. REININGER, *Asst. Secy.*

BOARD OF DIRECTORS

LEWIS L. CLARKE, *Chairman*
JULIAN B. BEATY
RICHARD F. GOODWIN
DR. J. RALPH JACOBY
HERBERT A. KAUFMANN
W. C. LANGLEY
LESTER S. OPPENHEIMER
WM. A. PRENDERGAST
M. F. SOTO
RICHARD H. VALENTINE

PRESIDENT'S REPORT

March 22, 1951

To the Stockholders of the
New York and Honduras Rosario Mining Company:

The reports of our Auditors, published herein, demonstrate that your Company has had a successful year. We are now operating in two Central American countries, and present to the Governments and people of Honduras and El Salvador, our cordial felicitations.

General Manager's Report (Pages 12 to 40):

It is hoped that Stockholders will carefully study this Report, especially its information concerning the Rosario property, which shows a marked reduction in available tonnage and ounce content in silver and gold.

It was in anticipation of the possibility of such a condition arising that we contemplated, ten years ago, (See President's Report 1940), a thorough study to determine the further possibilities of this property. World War II delayed the execution of this program, but it was undertaken as early as available personnel permitted.

A Geological Survey was completed in June 1950, which was the basis for a major Exploration Program now in progress, and which may not be concluded until June 1953. The cost of this Exploration Program will approximate $325,000.00. The exploration work to date has not resulted in the discovery of any new veins.

The facts are that, during 1950, there has been a decrease in Ore Reserves of 140,000 tons, and 1,990,375 ounces of silver and 13,158 ounces of gold. This situation suggests a policy of conservation in the use of our higher grade available reserves; and in view of the present market price of silver ($.9016 per ounce), it is very important to utilize our lower grade ores to the fullest possible extent. Our policy for the Rosario property will be governed accordingly for the year 1951, resulting, as nearly as we can determine at this time, in earnings for that property equaling those of 1950.

I believe that what General Manager Stephens has said in respect to the El Mochito and El Dorado properties, does not require any special review, except to say that the El Mochito property shows good prospects, and that the outcome of El Dorado, while disappointing at the present time, should ultimately prove satisfactory.

Investment in El Mochito and El Dorado:

On December 31, 1950, the Company's investment in these two properties was,

El Mochito	$ 655,573.30
El Dorado	1,090,577.97
	$1,746,151.27

Yuscaran and El Transito:

These properties have never been equipped for operation.

In the case of Yuscaran, we have decided to abandon it, and so notified the Government of Honduras.

No decision has been made in respect to El Transito.

The expenditures to December 31st, 1950, on these properties are,

Yuscaran	$ 227,859.00
El Transito	63,154.00

Earnings for 1950:

The following table shows the Earnings for the different properties:

	1950		1949	
	Earnings	Per Share	Earnings	Per Share
Rosario	$639,492.59 (A)	$3.45	$503,844.69	$2.71
El Mochito	246,048.74	1.32	105,146.22	.57
El Dorado	(33,978.28)	(.18)	4,033.56	.02
	$851,563.05 (A)	$4.59	$613,024.47	$3.30

( ) Indicates loss after providing for depreciation and depletion.

(A) NOTE — The above Earnings are exclusive of Special Income — Excess of Prior Years' provisions for Federal Taxes on Income over amounts required, $75,000.00 amounting to $.40 per share. These two divisions of earnings are shown collectively in the Profit and Loss Statement.

Neptune Gold Mining Company:

On Page Nos. 41 to 44 you will find the Annual Report of this Company and observe that its Capital indebtedness has been discharged.

Respectively submitted,

WM. A. PRENDERGAST,
President.

New York and Honduras

ROSARIO

	YEAR ENDED December 31, 1950	YEAR ENDED December 31, 1949
Number of men employed per working day	1,142	1,042
Tons of ore mined	195,678	179,416
Tons of ore milled	196,900	194,100
Average tons milled per day, full running time	563	567
Ounces of silver recovered	2,328,793	2,276,798
Number of ounces of silver recovered per ton of ore	11.83	11.73
Silver recovered — percentage	90.67 %	89.57 %
Sales value of silver recovered	$1,757,921	$1,646,881
Average sales value of silver per ounce	$ .75	$ .72
Average cost of silver per ounce (A)	$ .46	$ .44
Average profit on silver per ounce (A)	$ .29	$ .28
Average sales value of silver recovered per ton of ore	$ 8.93	$ 8.48
Average cost of silver per ton of ore (A)	$ 5.48	$ 5.18
Average profit on silver recovered per ton of ore (A)	$ 3.45	$ 3.30
Ounces of gold recovered	16,016.68	15,278.93
Number of ounces of gold recovered per ton of ore	.081	.079
Gold recovered — percentage	91.92 %	92.11 %
Sales value of gold recovered	$ 620,445	$ 682,478
Average sales value of gold per ounce	$ 38.74	$ 44.67
Average sales value of gold recovered per ton of ore	$ 3.15	$ 3.52
Ratio of gold to silver	1:145	1:149
Pounds of lead recovered		
Number of pounds of lead recovered per ton of ore		
Lead recovered — percentage		
Sales value of lead recovered		
Average sales value of lead per pound		

(A) After credit for sales value of gold and lead

STATISTICS

Rosario Mining Company

MINE	EL MOCHITO MINE		
	YEAR ENDED		
Increase (Decrease)	December 31, 1950	December 31, 1949	Increase (Decrease)
100	299	275	24
16,262	39,509	37,474	2,035
2,800	39,753	36,917	2,836
(4)	116	111	5
51,995	1,176,613	1,083,560	93,053
.10	29.60	29.35	.25
1.10 %	84.96 %	79.89 %	5.07 %
$ 111,140	$ 897,156	$ 783,772	$ 113,384
$ .03	$ .76	$ .72	$ .04
$ .02	$ .49	$ .45	$ .04
$ .01	$ .27	$ .27	—o—
$ .45	$ 22.57	$ 21.23	$ 1.34
$ .30	$ 14.55	$ 13.29	$ 1.26
$ .15	$ 8.02	$ 7.94	$ .08
737.75	683.78	661.63	22.15
.002	.02	.02	—o—
(.19 %)	85.47 %	80.98 %	4.49 %
($ 62,033)	$ 25,077	$ 25,944	($ 867)
($ 5.93)	$ 36.67	$ 39.21	($ 2.54)
($ .37)	$ .63	$ .70	($ .07)
(:004)	1:1721	1:1638	:0083
	616,311	875,126	(258.815)
	15.50	23.71	(8.21
	36.71 %	28,23 %	8.48 %
	$ 71,355	$ 102,722	($ 30,367)
	$ .12	$ .12	—o—

OPERATING STATISTICS

New York and El Salvador Mining Company, Inc.
(El Dorado Mine)

	YEAR ENDED		
	December 31, 1950	December 31, 1949	Increase (Decrease)
Number of men employed per working day	446	413	33
Tons of ore mined	59,974	50,499	9,475
Tons of ore milled	59,767	47,372	12,395
Average tons milled per day, full running time	188	144	44
Ounces of gold recovered	13,437.11	11,396.12	2,040.99
Number of ounces of gold recovered per ton of ore	.22	.24	(.02)
Gold recovered — percentage	88.44 %	87.30 %	1.14%
Sales value of gold recovered	$ 526,042	$ 508,739	$ 17,303
Average sales value of gold per ounce	$ 39.15	$ 44.64	($ 5.49)
Average cost of gold per ounce (A)	$ 37.52	$ 38.80	($ 1.28)
Average profit on gold per ounce (A)	$ 1.63	$ 5.84	($ 4.21)
Average sales value of gold recovered per ton of ore	$ 8.80	$ 10.74	($ 1.94)
Average cost of gold per ton of ore (A)	$ 8.44	$ 9.33	($ .89)
Average profit on gold recovered per ton of ore (A)	$ .36	$ 1.41	($ 1.05)
Ounces of silver recovered	59,393	54,137	5,256
Number of ounces of silver recovered per ton of ore	.99	1.14	(.15)
Silver recovered — percentage	76.11 %	75.03 %	1.08%
Sales value of silver recovered	$ 45,293	$ 39,215	$ 6,078
Average sales value of silver per ounce	$ .76	$ .72	$ .04
Ratio of silver to gold	4.42:1	4.75:1	(.33)

(A) After credit for sales value of silver.

STATEMENT OF CONSOLIDATED INCOME AND SURPLUS

New York and Honduras Rosario Mining Company and Subsidiary

	YEAR ENDED		
	December 31, 1950	December 31, 1949	Increase (Decrease)
Production of metals	$3,944,038.87	$3,789,751.51	$ 154,287.36
Less freight and other expenses on metals	200,977.35	223,931.65	(22,954.30)
OPERATING INCOME	$3,743,061.52	$3,565,819.86	$ 177,241.66
Operating expenses (including allowances for depreciation of 320,656.24 (1950) and $284,952.33 (1949)	2,542,924.40	2,394,917.77	148,006.63
	$1,200,137.12	$1,170,902.09	$ 29,235.03
New York administrative and general expenses	180,352.20	166,175.73	14,176,47
	$1,019,784.92	$1,004,726.36	$ 15,058.56
Add income from investments, etc.	59,750.89	51,744.80	8,006.09
	$1,079,535.81	$1,056,471.16	$ 23,064.65
Less other deductions from income:			
Interest	—o—	4,142.85	(4,142.85)
Provision for cost of planned 1950 exploration program	—o—	60,000.00	(60,000.00)
State and city taxes	2,940.18	6,272.53	(3,332.35)
Sundry	8,508.71	3,915.42	4,593.29
	$ 11,448.89	$ 74,330.80	($ 62,881.91)
	$1,068,086.92	$ 982,140.36	$ 85,946.56
Depletion	73,973.34	182,481.05	(108,507.71)
PROFIT BEFORE TAXES ON INCOME	$ 994,113.58	$ 799,659.31	$ 194,454.27
Taxes on income — estimated:	142,550.53	186,634.84	(44,084.31)
NET PROFIT	$ 851,563.05	$ 613,024.47	$ 238,538.58
Special income — Excess of prior years' provisions for federal taxes on income over amounts required	75,000.00	—o—	75,000.00
NET PROFIT AND SPECIAL INCOME	$ 926,563.05	$ 613,024.47	$ 313,538.58
Earned surplus — beginning of year	2,920,422.74	2,771,478.27	148,944.47
	$3,846,985.79	$3,384,502.74	$ 462,483.05
Cash dividends declared (amount per share $2.80 for 1950 and $2.50 for 1949)	519,769.60	464,080.00	55,689.60
Earned surplus — end of year	$3,327,216.19	$2,920,422.74	$ 406,793.45

See note to accompanying balance sheet.

CONSOLIDATED

New York and Honduras Rosario

DECEMBER

ASSETS

CURRENT ASSETS		
Cash		$ 680,520.99
Bullion at smelters and at mines — at realizable value less allowance for expenses		639,328.48
Marketable securities — at cost (aggregate quoted market $750,550.63):		
United States Government obligations	$ 461,140.63	
Domestic corporation bonds	25,006.25	
Domestic corporation stocks	179,575.93	
	$ 665,722.81	
Interest accrued on bonds	2,121.88	667,844.69
Accounts receivable		189,926.30
Broken ore in stopes and mill bins — at cost		173,534.41
Inventories — materials and supplies — at purchased cost not in excess of replacement cost		1,040,312.43
TOTAL CURRENT ASSETS		$3,391,467.30
INVESTMENT		
Neptune Gold Mining Company — 5,610 shares of capital stock of no par value — at cost (see note)		2,621.40
PREPAID ITEMS, ETC.		
Inventories of supplies, prepaid insurance, taxes, and other expenses		74,895.77
BUILDINGS, MACHINERY, AND EQUIPMENT		
At cost	$4,261,012.68	
Less allowances for depreciation	2,724,526.32	1,536,486.36
MINES, REAL ESTATE, AND CONCESSIONS		
At valuation originally established in 1880 ($1,500,000.00) plus additions at cost	$1,961,914.84	
Less allowances for depletion	1,756,454.39	
	$ 205,460.45	
Costs and expenses to date on properties, not in operation	301,556.42	507,016.87
		$5,512,487.70

NOTE—The Company's equity in the net assets of Neptune Gold Mining Company (as shown in its annual report for the year 1950) exceeds the cost of investment in stock by approximately $820,000.00 and the equity in its net income for the year was approximately $103,000.00. No dividends were received from that Company in 1950.

BALANCE SHEET

Mining Company and Subsidiary

31, 1950

LIABILITIES

CURRENT LIABILITIES

Accounts payable			$ 121,862.04
Drafts payable			7,526.12
Accrued expenses			18,075.64
Provision for estimated taxes on income			150,498.96
Provision for estimated cost of geological survey and for estimated cost of planned 1950 exploration program (unexpended portion)			30,988.75
TOTAL CURRENT LIABILITIES			$ 328,951.51

CAPITAL STOCK AND SURPLUS

Capital Stock (par value $10.00 per share):			
Authorized	188,367 shares	$1,883,670.00	
Less in treasury	2,735 shares	27,350.00	
Outstanding	185,632 shares	$1,856,320.00	
Earned Surplus		3,327,216.19	5,183,536.19
			$5,512,487.70

MARKETABLE SECURITIES

New York and Honduras Rosario Mining Company and Subsidiary

December 31, 1950

	Par Value	Quoted Market Prices December 31, 1950	
UNITED STATES GOVERNMENT SECURITIES			
Treasury bonds:			
2½% due December 15, 1972-67	$307,000.00	$307,654.00	
Savings bonds:			
2½% Defense Series "G" due May 1, 1953	50,000.00	48,800.00	
2½% Defense Series "G" due January 1, 1955	100,000.00	96,400.00	$452,854.00
DOMESTIC RAILROAD BONDS			
New Orleans, Texas and Mexico Railway Co., 1st Mortgage 5½%. Series "A" due April 1, 1954	25,000.00	$ 25,000.00	25,000.00
STOCKS	No. of shares		
American Chicle Co., common stock, no par	1,200	48,300.00	
California Water Service Co., common stock, par value $25.00 per share	250	6,500.00	
The Home Insurance Co., New York, capital stock, par value $5.00 per share	1,000	34,500.00	
Indiana Gas and Water Co., Inc., common stock, par value $10.00 per share	90	1,811.25	
Iowa Southern Utilities Company of Delaware, common stock, par value $15.00 per share	1,500	23,250.00	
Public Service Co. of Indiana, Inc., common stock, no par	500	13,937.50	
San Jose Water Works, common stock, par value $25.00 per share	250	7,500.00	
Socony-Vacuum Oil Co. capital stock, par value $15.00 per share	510	13,005.00	
Standard Oil Co. of California, capital stock, no par	551	50,623.13	
Standard Oil Co. of New Jersey, capital stock, par value $25.00 per share	537	49,269.75	
Tide Water Power Co., common, no par value	3,000	24,000.00	272,696.63
			$750,550.63

Report of Auditors

To the Stockholders of
New York and Honduras Rosario Mining Company:

We have examined the consolidated balance sheet of New York and Honduras Rosario Mining Company and subsidiary, as of December 31, 1950, and the related statement of consolidated income and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures, at offices in New York and at the Mines, as we considered necessary in the circumstances, including examination of Minutes of Stockholders and Directors meetings.

In our opinion, the accompanying balance sheet and statement of income and surplus present fairly the consolidated financial position of New York and Honduras Rosario Mining Company and subsidiary, at December 31, 1950, and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST

New York, N. Y.
March 9, 1951

GENERAL MANAGER'S REPORT

January 1, 1951.

To the Officers and Directors of the
New York and Honduras Rosario Mining Company
120 Broadway
New York, New York

Gentlemen:

Operating results for the year 1950 and the present condition of your properties, in Central America, are set forth below:

THE ROSARIO MINE (HONDURAS)

Ore Reserves

Active and Inactive Ore Reserves are again based on silver at 70 cents and gold at $35.00 per troy ounce. Annex "A" and Annex "B" of this report list the vein reserves in detail.

Active Ore Reserves

	Tons Ore Plus Waste	Average Troy Ozs. per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
January 1, 1951	503,751	17.15	.1437	8,638,657	72,377
January 1, 1950	632,698	16.63	.1335	10,520,465	84,457
Decrease	128,947			1,881,808	12,080
Increase		0.52	.0102		

Inactive Ore Reserves

January 1, 1951	16,473	8.03	.0704	132,342	1,160
January 1, 1950	28,426	8.47	.0787	240,909	2,238
Decrease	11,953	0.44	.0083	108.567	1,078
Increase	.....	.....	.....	.....	.....

It will be noted from the above summaries of Active and Inactive Reserves that the total loss for the year was 140,900 tons of ore, while there was a loss of 1,990,375 ounces of silver and 13,158 ounces of gold. This loss is attributable to our inability to locate any new ore and the failure of the Santa Fe-4 and Culebra-1 and 2 veins to continue downward. The small gain in per ton value of the Active Reserves of .52 ounces silver and .01 ounces gold for the year is attributed to the conservative mining program followed.

Notwithstanding a rather extensive exploration program carried out during the year, no new veins of any significance have been discovered.

The shortage of labor continued into the first six months of 1950 and at the end of June the tons mined showed a loss of

11,668 tons over that delivered to the mill. However, the labor situation improved during the last half of the year and this loss was reduced to only 1,220 tons for the year, leaving a broken ore reserve of 36,811 tons on January 1st, 1951. Although this broken reserve is less than had been hoped for, it is considered satisfactory after taking into consideration the great loss during the first six months.

During the year efforts were continued to develop new miners, and the results of the operations during the last half of the year indicate that these efforts were well worthwhile.

Exploration and Development

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet	Diamond Drilling
1950	10,159	7,904	3,898	21,961	1,672
1949	8,916	6,794	5,251	20,961	1,669
Decrease			1,353		
Increase	1,243	1,110		1,000	3

A long range exploration, diamond drilling and development program was initiated early in 1950, after carefully considering the exploration work being done in the mine and recommendations by the consulting geologist. This program will be continued through 1951 unless world conditions become such as to prohibit the purchasing of the necessary supplies.

The program will consist of approximately:

30,000 feet Crosscutting and Drifting

18,000 feet Diamond Drilling

This work is to be completed by the end of June, 1953 and will cost approximately $325,000.00.

The results of the long range exploration program through December are as follows:

Long Range Exploration Program

Item	Location	Feet Advance To Date	Feet in Ore To Date	Assay Value Using 3' Stoping Width Ag.	Au.
#1	Lower-650, Crosscut-42	997'	0	0	0
#2	Lower-1150, Crosscut-2	1057'	0	0	0
#3	Lower-300, Crosscut-156	570'	0	0	0
#5	Lower-200 Colonia, Crosscut-94	484'	0	0	0
#6	Lower-400 Santa Fe-4, Crosscut-146, Drift-153	457'	60	19	.07
#7	Lower-650 Esperanza, Crosscut, Drift-53	499'	0	0	0
#8	Lower-650 Santa Fe-4, Drift-40 East	40'	0	0	0
#10	Upper-150 Northwest, Crosscut-62, Drift-65, Drift-67	798'	80	12	.04

	Location	Feet Advance To Date	Feet in Ore To Date	Assay Value Using 3' Stoping Width Ag.	Au.
#11	Lower-200 Nueva, Crosscut-95	374'	0	0	0
#12	Zero Culebra, Crosscut-69, Drift-70	512'	0	0	0
#13	Lower-300 Southwest-1, Drift-6	673'	110	22	.07
#14	Upper-350 Termópilas, Drift-47	7'	0	0	0
#21	Upper-350 Candelaria, Crosscut-41	145'	0	0	0
#26	Lower-650 Crucero, Crosscut-51	1177'	0	0	0
#27	Winze on West Crosscut Surface	49'	0	0	0
	TOTAL	7839'	250	18	.06

Diamond Drilling

Geologist's Recommendation No. 25
(Diamond Drill Hole No. 42)

To Date 825 Feet

Lower-650 San Benito-2, Crosscut-42, Item No. 1

This crosscut was driven continuously throughout the year and advanced 997 feet. It is entirely in sediments and although a few small stringers have been cut, these show nothing of importance. There remains approximately 350 feet of work to be done on the proposed program and this should be completed by May first and then, if nothing of importance is found, all pipe, rail, etc. will be salvaged.

Lower-1150 Rosario, Crosscut-2, Item No. 2

An advance of 1,057 feet was made on this level during 1950. In Block No. 28, at Station 6741, the Rosario vein was cut and to date this has been drifted on for 300 feet West. At Station 6771 plus 180 feet West, the Candelaria vein was found where it intersects the Rosario. At the end of 1950, 150 feet of drifting had been done on the Candelaria vein.

Both the Rosario and Candelaria veins are wide and highly mineralized, but since the silver and gold values are so low, it will not be profitable to mine and treat them with the present mill flow sheet. Development will continue on both veins during 1951 in hopes that a higher grade silver and gold ore will be found or a tonnage sufficient to warrant installing a small mill to treat the silver, gold, lead, zinc and copper ore of these veins.

The 450 feet developed on these veins have a width of approximately 4 feet, carrying a silver content of approximately 4 ounces and .01 ounces gold per ton. Assay results indicate this ore carries additional values in the base metals as follows: Copper 2.5%, Zinc 5% and Lead 5%.

Lower-300 Colonia, Crosscut-156, Item No. 3

This crosscut, which was started in 1948, was driven an additional 570 feet during the year and this completed the work proposed under the exploration program. No veins or stringers of importance were found.

It is proposed to drive a diamond drill hole North from the present face to cut the downward projection of some surface showings of the San Miguel and Concepción group and, unless the diamond drill hole shows something of importance, all supplies will be taken out and the crosscut abandoned.

Lower-200 Colonia, Crosscut-94, Item No. 5

A total of 487 feet was driven on this crosscut during the year, and no veins have been cut to date. As mentioned in last year's report, this crosscut is to cut the extensions of the Colonia-2, Colonia-3 and Nueva-1 veins and the downward projections of some surface showings. It still has the projections of Colonia-3 and Nueva-1 to cut before reaching its objectives. The proposed work on this crosscut should be completed in 1951.

Lower-400 Santa Fe-4, Crosscut-146, Item No. 6

This crosscut was completed to the contact of the dacite and sediments. At Station 6759 a small stringer was found and this was followed West for 25 feet where a branch of the Santa Fe-4 was encountered. The heading on this branch vein, known as drift No. 153, gave a lateral development of 60 feet in ore, of 19 ounces silver and .07 ounces gold over a stoping width of 3 feet. No blocked out reserve is carried on this branch vein as it represents a very small tonnage.

Lower-650 Esperanza Crosscut, Item No. 7

This crosscut was connected to the Santa Fe-4 to serve as a motor haulageway and to cut the eastern extension of the Santa Fe-2 and San Benito-2 veins. The extension of the San Benito-2 vein showed good width but very low values. A drift, known as No. 53, was driven on this for 90 feet without any improvement in values. A raise was started on this vein and has been driven 90 feet. At track plus 30 feet it went into ore of stoping grade which has continued to the present height. This raise is 225 feet East of any work on the Lower-500 level and there is a possibility of this developing into a good block of ore.

Lower-650 Santa Fe-4, Drift-40 East, Item No. 8

Only 40 feet of advance was made on this drift during the year, but it is proposed to concentrate on this item during 1951 as the program calls for approximately 1,000 feet of work.

Upper-150 Northwest, Crosscut-62, Item No. 10

This crosscut, which was driven to cut the upper reaches of the Northwest-3 vein where it had been faulted off between the Lower-200 and Zero levels, cut a vein which has been designated as Northwest-4. Crosscutting is now in progress on the Zero level. Three thousand three hundred and nineteen tons of 13 ounce silver and .04 ounces gold have been added to the reserves as a result of this crosscut.

Lower-200 Nueva, Crosscut-95, Item No. 11

This crosscut was driven 374 feet where it connected to the Candelaria Main vein. No branch veins off the Candelaria were disclosed by this work. It is proposed to continue this crosscut an additional 150 feet during 1951 in the hope of finding a downward projection of the Candelaria Main vein below the Zero level.

Zero Level Culebra-1, Crosscut-69, Item No. 12

This crosscut was driven 315 feet where it cut the Rosario stringer vein, and this vein was then developed for 195 feet East without producing any ore of commercial value. A raise has been started from this drift to connect with the Upper-150 Rosario Main vein. It is proposed to drive a sub-level below the Upper-150 on the Rosario Main vein so as to mine a floor block left under the Upper-150 and this sub-level will serve as a haulage-way to recover any old fills above this level on the Rosario Main vein.

Lower-300 Southwest-1, Drift-6, Item No. 13

It was the intention to drift on the Southwest-1 vein until the lateral extension of the Independencia and Santa Fe-1 veins were cut. However, at the intersection of the Southwest-1 and the San Blas-1 fault, the continuation of the Southwest-1 has not been found. It is now believed that the dacite-sediment contact on the Lower-300 has been moved approximately 600 feet to the South on the San Blas-1 fault, the same as it was on the Upper-150 level.

It is not proposed to do any further work in looking for the Southwest-1 vein beyond the San Blas-1 fault at the present time, but instead to drive a crosscut West from the Lower-300 Santa Fe-1, Crosscut-40, to the dacite-sediment contact and then to follow this contact North to the San Blas-1 fault. A diamond drill hole will be driven West from the dacite-sediment contact to cut the extension of the Southwest-1 vein, provided it exists beyond this fault.

A considerable amount of good grade ore was found in Drift-6 (See Southwest-1 under *stoping*).

Upper-350 Termópilas, Drift-47, Item No. 14

Only 7 feet of drifting was done during the year on this item, but it is proposed to continue this work during 1951.

Upper-350 Candelaria, Crosscut-41, Item No. 21

This crosscut had an advance of 145 feet for the year. It was driven in the footwall of the Candelaria main vein and served as a means for pulling old fill ore from the Candelaria. This crosscut will be turned North in Block No. 39 and pass into the hanging wall of the Candelaria main vein to cut a branch vein which, according to the old maps, is known to exist.

Lower-650 Crucero, Crosscut-51, Item No. 26

This crosscut was started from the surface beyond the Crucero gulch at the elevation of the Lower-650 motor haulage level. It is planned to drive this crosscut through the Guacamayas spur and beyond the Zapote Creek. The surface indications are that the crosscut will be in dacite for approximately 2,500 feet. A total of 1,177 feet was driven during the year, all in dacite. No vein or indication of ore has been found to date.

Winze at West Crosscut Portal, Item No. 27

This winze was sunk 49 feet on a narrow, low grade vein which failed to continue at depth. This work has been stopped and the item considered finished.

Diamond Drill Hole No. 42, Geologist Recommendation No. 25

This hole was driven near the West crosscut portal at co-ordinates + 1990.5 North and —3372.5 East on a bearing due South at an angle of —30° to the Horizontal.

The purpose of this hole was to cut the extension of the San Joaquin vein. It was originally proposed to drill the hole 1,000 feet, but due to the caving ground, it was stopped at 912 feet. The entire length of the hole was in sedimentary formations, most of which was grits.

Exploration and Development

In addition to the 7,839 feet of crosscutting and development work under the long-range exploration program, an additional 10,273 feet were driven during the year in connection with the regular mining operations.

Of the 21,961 feet of exploration and development footage driven during the year, 16,666 feet of this represent new exploration work. The additional 5,295 feet consisted of raises (3,898 feet) and sub-level drifting in preparation for stoping operations. Of this 16,666 feet, 1,540, or 9.2%, was in ore averaging 21 ounces silver and .12 ounces gold per ton, over a stoping width of 3 feet.

Diamond Drilling

Hole No. 43

This hole was driven from the West crosscut branch in Block No. 81 due North at —25° to the horizontal to prospect at depth the dacite body North of the West crosscut. The hole was driven to a depth of 300.5 feet and was stopped due to blocky, bad ground which did not permit the recovery of either sludge or core.

At collar +95 to 100 feet, the sludge sample assayed 5 ounces silver and .35 ounces gold per ton. This was the only ore indication encountered. A crosscut will be driven North from the West crosscut to check this sludge sample area during 1951.

Hole No. 44

This hole was driven from the Lower 650 Santa Fe-4, Block No. 80 and 400 feet East of the Esperanza crosscut, further to prospect stringers found in Esperanza.

This hole was driven North 15° East at +10° to the horizontal from near Station 6778, Santa Fe-4, Drift-40 South. It was stopped after drilling to a depth of 397 feet. No values of importance were found.

Vein Development and Stoping

Of the total of 196,898 tons of ore delivered to the mill during 1950, 21,181 tons or 10.76% came from old fills, 21,233 tons or 10.78% came from stopes not on Blocked Out Reserves, and 10,997 tons or 5.59% from development.

Excluding old fills, the following veins supplied the greater part, or approximately 49.40%, of the ore: Candelaria Branch-2, Colonia-1, Culebra-1, Jucuara-1, 2 and 4, Rosario Stringer-1, Santa Fe Main, Santa Fe-4, Salvador, Veta-4 North and Veta-4 South.

The balance of the tonnage was taken from the following veins: Candelaria Branch-1, Capitana-2, Carmen, Catalina-2, Colonia-3, Crisanta-2 and 3, Culebra-2, Culebra Stringer, Fortuna North, Independencia, Independencia-4, Jucuara-3, 7, 12 and 13, 56 Fault Vein, Northwest-1, Northwest-3, Nueva, Nueva Branch-1, Porvenir, Rosario, San Benito-1, San Blas-2, San Joaquin, San Luis, Santa Fe-2, 3, 5 and 7, Santa Gertrudis-1, Santa Gertrudis-2, South San Miguel, Southwest-1, 3 and 5, Termópilas and West.

Number of veins worked during the year was 55.

Salvador Group

Salvador Veins

The Salvador was again one of the largest producers. 6,704 tons were removed, of which 6,556 came from stoping operations. A reserve of 6,155 tons of 11 ounce silver and .04 ounce gold remains. Mining operations will continue during 1951 at approximately the same rate as 1950. There is only a small chance of finding any additional ore since the development of all branches and extensions is practically completed.

Jucuara-1 (Fortuna)

Development work on the Upper-350 level, Drift-53 allowed an increase to reserves of 4,703 tons of 26 ounce silver and .04 ounce gold. The chances of finding additional ore on this vein are practically eliminated both laterally and vertically. Stoping operations for 1951 will approximate that of 1950 when 11,084 tons were extracted. A reserve of 37,841 tons of 22 ounce silver and .05 ounce gold remains.

Jucuara Group

Jucuara-2 Vein

The Jucuara-2 vein was the second largest producer for the year with 12,397 tons, of which 11,305 came from stoping operations. Work was concentrated on the levels below the Lower-650 in an effort to extract all the ore as quickly as possible so as to eliminate high pumping cost. Development and stoping operations will be carried on at approximately the same rate during 1951.

Jucuara-4 Vein

Stoping operations, on a small scale, were carried on throughout the year. There will be no further additions to the reserves, since all depelopment work has been completed. A reserve of 14,130 tons of 21 ounce silver and .07 ounce gold remains.

Sante Fe Group

Santa Fe Main Vein

The low grade ore blocked out on this vein in 1949 was mined as heavily as possible during the year so as to take advantage of the satisfactory silver price. Of the 8,572 tons produced, 7,803 were from stoping operations. There remains a small tonnage, 1,316 tons, of 9 ounce silver and .06 ounce gold. It is proposed to deplete this during 1951.

Santa Fe-2 Vein

As mentioned in last year's report, mining operations on this vein were held to the minimum required to maintain the mill head at 13 ounces silver per ton as this is the best grade ore. Only 4,233 tons were mined leaving a reserve of 40,413 tons of 48 ounces silver and .47 ounces gold. It is not proposed to increase these operations in 1951 over that of 1950.

Santa Fe-4 Vein

This vein was the largest producer for the year, with 16,009 tons being extracted of which 3,311 tons came from development operations. It is now believed that lateral and vertical limits of the vein have been established on all levels above the Lower-650. Results on the Lower-750 have been disappointing to date.

The vein was cut late in the year by a crosscut driven from No. 3 shaft and lateral development to the East for 400 feet has failed to find any ore of milling grade. Development work on this level will be pushed during 1951, as there remains 700 feet of ore in the floor of the Lower-650 level ahead of the present Lower-750 face.

This vein has the largest blocked out reserve of any and stoping operations for 1951 will be confined to the lower grade blocks.

San Benito-2 Vein

The policy of mining only sufficient ore from the higher grade gold and silver veins to maintain the heads at the desired grade was adhered to during the year and consequently, the tons mined were only 3,830. It is not proposed to make any changes in the above policy during 1951.

Old Mine Group

Candelaria Branch-2 Vein

Work on this vein was confined almost entirely to stoping operations during the year, since it is desired to eliminate all this low grade ore possible while silver is at a satisfactory price. There remains a reserve of 14,183 tons of 9 ounce silver and .06 ounce gold and this will be mined at an increased rate during 1951.

Colonia-1 Vein

Stoping operations on this vein were confined to the lower grade blocks during the year and this policy allowed an increased value of 2 ounces silver per ton on the remaining blocked out reserves. Present plans are to follow the same conservative policy for 1951.

Culebra-1 Vein

Active development on the Lower-500 level failed to produce any additional ore. Two hundred and fifty feet of this work was under good grade ore on the Lower-400. A crosscut will be driven from the Lower-650 level to cut the downward projection of this vein during 1951 and it is hoped that ore of stoping grade will be found. The small reserve of 4,457 tons of 18 ounce silver and .07 ounce gold will be mined during 1951.

Culebra-2 Vein

By continuing the development work south from the Lower-500 Culebra-1 vein, the Culebra-2 was found. which resulted in a small addition to the reserves. The crosscut mentioned under Culebra-1, Lower-650 level, will be continued to cut the projection of this vein on that level. A reserve of 8,901 tons of average grade exists and this will be steadily depleted during 1951.

Northwest-1 and 3 Veins

Continued development and stoping operations on these two old veins during the year resulted in a production of 6,497 tons from stopes, 266 tons from development and 2,336 from old fills. The possibilities of finding any additional ore are limited to the Lower-500 level and this will be investigated during 1951.

Southwest-1 Vein

Although no reserve was carried on this vein for 1950, a total of 6,194 tons from stoping and 1,199 from development was extracted. This ore resulted from the exploration work done on the Lower-200, Lower-300 and Lower-400 levels. The finding of any additional ore on this vein is apparently limited since it has been terminated on the South by the San Blas-1 fault. Diamond Drill work will be done from the Santa Fe-1, Crosscut-40 to see if the vein extends beyond this fault. (See Item No. 13 Long Range Exploration)

OLD FILLS

The grade of ore from old fills during the year averaged 7.187 ounces silver and .045 ounces gold per ton. It is becoming increasingly difficult to recover these old workings, but as long as silver remains at a satisfactory price, efforts will be made to recover as much tonnage as possible.

The major source of ore from old fills follows in detail:

Buena Ventura	1,676	Tons
Candelaria	6,790	"
Colonia	500	"
Culebra-1	1,779	"
Guadalupe	897	"
Northwest-1	2,336	"
Nueva	1,851	"
Rosario Main	3,037	"
Salvador	1,939	"
	20,805	Tons

Numerous other veins produced the balance of 376 tons.

Ore Production (Delivered to the Mill)

	1945	1946	1947	1948	1949	1950
From Stopes & Old Fills	167,970	178,873	174,110	184,726	171,032	185,901
From Development	25,096	23,352	25,779	15,021	23,159	10,997
TOTAL	193,066	202,225	199,889	199,747	194,191	196,898

General Mine Comments

A scarcity of experienced mine labor existed for the first six months of the year, and at the end of this period the mine had delivered 11,677 tons to the mill more than tons mined. This tonnage came from broken reserves. However, during the last half of the year, the training program, which had been started more than a year before, began showing results and this shortage was reduced to 1,220 tons for the year. The outlook for experienced labor, while not good, is much better than it was at the beginning of 1950. The policy of training new men and less skilled laborers will be continued, and it is believed that normal operations will be possible by the middle of the year at least.

It is proposed to maintain the broken ore reserves at least equal to those at the end of 1950 and an effort will be made to increase these to around 45,000 tons.

Awaiting further results on depth possibilities, actively being pursued at the present time, no favorable developments have occurred that give any indications of the existence of new ore zones.

Continuous development of old vein branches, mining of low grade ore not on reserves and old fill ore should partially off-set the depletion for 1951.

The cost per ton milled for the year was $7.58 compared to $7.65 for 1949. The greater part of this decrease is accounted for by the tons milled over mined during the year being more nearly equal than in 1949. During 1949 there was a charge of $79,945.45 against operations, for the depletion of broken reserves, while in 1950, this only amounted to $8,891.50. Due to ever increasing costs of freight, supplies and labor, it is doubtful if the same cost per ton of ore will be realized during 1951.

The Mill

During the year, the mineral jig mentioned in last year's report was installed in the No. 1 Ball Mill Classifier circuit. As the increased recovery was not sufficient to off-set the high freight and smelting charges on the concentrates, this jig was removed from the circuit after approximately three months operation. A new type DSF Classifier 6'-0" x 18'-4" x 2½" slope was added to the mill flow sheet during the year. Part of the increase in silver recovery, from 89.812% in 1949 to 91.017% in 1950, can be attributed to the addition of this classifier. The

only new addition proposed for the mill during 1951 will be the replacing of one of the original thickeners. The order for this thickener was placed in June, 1950 and delivery is expected in February, 1951.

Hospital

The company has for some time believed that adequate care of its employees and their families needing hospital service required additional hospital facilities. Therefore, in order to meet this situation in a forthright way, the Board of Directors authorized the construction of a new and modern hospital, work on which was started during the last quarter of the year. It should be completed during May, 1951.

EL MOCHITO (HONDURAS)

Ore Reserves

We are giving you below a summary of the ore reserves for El Mochito:

Comparative Summary — Active Ore Reserves

	Tons of Ore Plus Waste	Average Troy Ounces per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1951	141,002	33.28	.0217	4,692,958	3,053
January 1, 1950	148,323	32.410	.0206	4,806,979	3,051
Increase		.87	.0011		2
Decrease	7,321			114,021	

Comparative Summary — Inactive Ore Reserves

January 1, 1951	6,768	20.93	.0250	141,672	169
January 1, 1950	7,041	23.62	.0314	166,311	221
Increase					
Decrease	273	2.69	.0064	24,639	52

The decrease in tonnage and ounces in both active and inactive Ore Reserves is, to a large extent, accounted for by the scheduled development on the Lower-650 level being delayed due to floods in the mine.

Exploration and Development

FOOTAGE DRIVEN

Year	Drift or Crosscut	Raises Shafts & Winzes	Total Feet	Diamond Drilling
1950	4,896	1,374	6,270	2,925
1949	3,317	2,342	5,660	1,295
Increase	1,579		610	1,630
Decrease		969		

The above includes work at Caliche during 1950 as follows:

1950	381	23	404

Upper-50 Level

A total of 190 feet of crosscuts was driven on this level to connect prospect No. 7 with prospect No. 8 through Crosscut No. 9. Although showings of commercial grade ore were encountered in three different places in this crosscut, no attempt was made to block it out for inclusion in the ore reserves, but it will be thoroughly developed at a later date.

Zero Level and Sub-levels

At total of 182 feet of drifting, 158 feet of crosscutting and 42 feet of raises was driven during the year. Of this total, 115 feet is accounted for in Adit No. 3 Crosscut which is being driven to explore the area in the vicinity of prospect No. 14 and which will also be used in connection with stoping operations through Raises No. 3 and No. 9 from the Lower-150 level. These stopes will be carried above the Zero level if ore exists. The remainder of the advance realized was in developing the ore under prospect No. 14.

Lower-150 Level

There was more development work done on this level than on any other, the totals being 195 feet of drifts, 1,610 feet of crosscuts and 218 feet of raises.

The above footage includes that in Crosscut No. 9 which is being driven to cut the downward projection of ore found in surface prospect No. 2 and to open up the area between the main ore body and this prospect. Two small ore bodies were cut by this crosscut, but they are not included on ore reserves. There is only a short distance to go before this crosscut will be under surface prospect No. 2.

Crosscut No. 14, which is being driven under prospect No. 8 and thence to come under prospect No. 7, cut a relatively small ore body immediately below prospect No. 8. This has been developed laterally to the North and South by Drift No. 24, but insufficiently to include on ore reserves. It is planned to develop this ore further in 1951.

The remainder of the development work was done in opening up known or indicated ore in the central area. Raise No. 10 was connected through to the Zero level to provide access for the development of the ore indicated in this area and to serve as a permanent manway.

Lower-275 Level

The major portion of the lateral and vertical work done on this level, comprising 80 feet of drifts, 615 feet of crosscuts and 463 feet of raises, was for operational purposes or a combination of exploration with operation to provide fill for stopes.

Crosscut No. 9 is being driven parallel to Crosscut No. 14 on the Lower-150 to cut ore that was found on the level above.

A small amount of ore was opened up in Crosscut No. 2 South in the area around Raise No. 22, but it is not sufficient for ore reserve purposes at this time.

Lower-400 Level

There was a total of 34 feet of drifts, 622 feet of crosscuts, 295 feet of raises and 24 feet of winzes driven on this level.

Crosscut No. 5 cut what originally appeared to be a rather extensive ore body. However, subsequent development work through Crosscut No. 21 in conjunction with diamond drilling indicated this ore occurred in a somewhat restricted area. A total of 6,251 tons averaging 28 ounces of silver was added to Active Reserves. Further work on this will be done more accurately to define the limits of this body of ore.

Raise No. 17 was driven primarily as a waste pass providing a continuous passage from Raise No. 22 above through Raise No. 3 below.

All other development work carried out on this level was intended to explore those areas in which ore had been found on the Lower-275 level above or on the Lower-525 level below. There were no large quantities of ore located.

Lower-525 Level

A total of 46 feet of drifting, 306 feet of crosscutting, 187 feet of raising and 58 feet of shaft sinking was accomplished on this level during the year under review.

A drift was driven from Crosscut No. 2 following a small stringer of ore in the Raise No. 10 area. Although some ore was produced from this drift, no important finding was made, but Raise No. 10 outlined a small block which will be mined in 1951.

All of the crosscuts driven on this level were for the purpose of locating the downward projection of the ore body which occurs in Crosscuts Nos. 5 and 21 on the Lower-400 level. Some ore showings were encountered in Crosscut No. 13 and a raise is to be started to explore this vertically. Crosscut No. 17, which was driven from Crosscut No. 13 to come under the ore as projected from the level above, did not indicate a definite connection between the two, but further exploration work will be done to confirm or eliminate this possibility. Crosscut No. 16 is a continuation of Crosscut No. 13 in this same area.

Lower 650 Level

The shaft was completed to this level early in the year and the main crosscut to the ore body started. Due to the exceedingly heavy rains starting in June, this level was flooded and remained under water until mid November, which precluded reaching the ore body by the end of the year. Had it been possible to develop this level during the year, the active ore reserves would have been materially increased. It is also worthy of note that indications are this ore contains higher sulphides which should make it more amenable to treatment, particularly on the base metals.

Caliche

Development work carried out at this property consisted of the driving of Adit No. 8 and starting a shaft from which exploratory crosscuts will be driven to prospect at depth, and the driving of a drift to connect Adit No. 1 with Winze No. 2 and on to the shaft being sunk in Adit No. 8.

The long range plans for prospecting in this area will be contingent upon results of the current development work and also upon the recommendations of the Geological Staff after they have progressed sufficiently with their survey, which is scheduled for the early part of the year. This work will be pushed as much as possible during 1951.

Diamond Drilling

The total footage drilled during the year amounted to 2,925 feet. Part of this footage was in connection with operations in locating by-passes around bad ground and in testing ground conditions preliminary to driving ore or waste passes.

The information gained from drilling for exploratory purposes has, in three instances, indicated the presence of ore and these areas will be developed further. The remainder of the drilling was either negative or done more accurately to define the limits of the ore in operating stopes. This work will be continued in those areas where it is indicated by current development and as recommended by the Geological Staff after their detailed study.

Geological Survey

During the year the Geological Staff made a preliminary examination of the area preparatory to making a more detailed study in 1951.

Preliminary maps were made of the underground workings on some levels which give a generalized picture of the geology in the mineralized areas. This work will be intensified during 1951, both underground and on the surface.

Outlying Ore Bodies

The policy of mining as much ore as possible from the outlying ore bodies was followed during the year and proved to be quite successful as 63.64% of the ore sent to the mill was from this source. This has the advantage of conserving the reserves in the main ore body while allowing for more development work. This established policy will be continued.

General Mine Comments

At the end of the year the mine is in good physical condition. Additional pumping facilities are being provided which, combined with surface trenching and drainage, minimize the possibility of a recurrence of the mine partially flooding even under the most adverse conditions. A stand-by diesel driven generator will be installed during 1951.

The mining system as adopted on the Lower-525 level, after a period of experimentation, has proven satisfactory. This same system will be adopted on the Lower-650 level and the Lower-275 level unless ground characteristics indicate a modification.

Labor conditions during the year were improved over the previous year.

The Mill

The results realized in this phase of the operations were generally satisfactory with no change or modifications being indicated in the present flow sheet. Overall recoveries have shown an improvement and the dissolved value loss has declined.

The filtration of the flotation tailings has continued to be a source of trouble due to the fineness of the ore in the pulp. This problem is being given attention and laboratory tests indicate that flocculation of the pulp will help to eliminate this difficulty.

The milling costs have been lowered slightly during the year even in the face of rising costs of materials and supplies. Prospects of further reduction in these costs do not seem too bright.

With the installation of the new Pachuca tank during 1951, a longer contact time during agitation will be realized which should result in a corresponding extraction increase in the cyanide plant.

The inherent characteristics of the Mochito ores and the numerous metals they contain indicate that additional laboratory tests will be essential to solve the somewhat complex metallurgical problems so that the maximum of values may be recovered.

The reduction works for 1950 are as follows:

Bullion and Concentrates Production

	Ounces		Tons
	Ag.	Au.	Pb
Jig & Table Concentrates	182,784.39	140.564	134.4504
Flotation Concentrates	492,697.91	230.363	170.6370
Bullion	492,881.02	329.000	
TOTALS	1,168,363.32	699.927	305.0874

Tonnage Milled, Including Sorted Ore, Previous to January 1, 1951

Total including stoping, & development previous to Dec. 31, 1949	Total including stoping & dev. for the year 1950	Grand Total including stoping & dev. Jan. 1, 1951
62,997	39,753	102,750

Total Production to Date — Silver & Gold

Net Troy Ounces Previous to Dec. 31, 1949		Net Troy Ounces for year 1950		Total Net Troy Ounces To Jan. 1, 1951	
Ag.	Ag.	Ag.	Au.	Ag.	Au.
1,935,364.91	1,068.661	1,168,363.32	699.927	3,103,728.23	1,768.588

Total Production to Date — Lead

Net Tons Previous to Dec. 31, 1949	Net Tons for year 1950	Total Net Tons to Jan. 1,1951
655.0358	305.0875	960.1233

Yuscaran

The only work done on this property during 1950 was in connection with keeping a portion of the mine workings open and maintaining the property in general. There was a total expense incurred of $6,723.45, mostly for taxes, labor and operating supplies.

As of January 1st, 1951, all mineral rights were relinquished in accordance with the applicable mining laws. This action was taken as there were no indications that this property could be operated on a profitable basis under existing economic conditions. No mineral zone taxes will be paid during 1951 and the only work will be in salvaging the materials and supplies remaining in the mine and transferring them to the operating properties.

Transito

The small crew employed on this property during the year was engaged in general maintenance of both the mine and surface installations.

Total expenses for the year amounted to $2,914.47, the major portion of which was for taxes and labor.

EL DORADO (EL SALVADOR)

Ore Reserves

The comparative summaries of Active and Inactive Ore Reserves appear immediately below:

Comparative Summary — Active Ore Reserves

	Tons of Ore Plus Waste	Average Troy Ounces per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
January 1, 1951	150,010	1	.25	157,099	38,232
January 1, 1950	157,459	1	.25	160,309	39,511
Increase					
Decrease	7,449			3,210	1,279

Comparative Summary — Inactive Ore Reserves

January 1, 1951	50,032	0.8	.22	42,444	10,878
January 1, 1950	36,208	0.9	.22	32,192	8,052
Increase	13,824			10,252	2,826
Decrease		0.1			

Comparative Summary—Active and Inactive Ore Reserves

Grand Total, 1951	200,042	1.0	.24	199,543	49,110
Grand Total, 1950	193,667	1.0	.25	192,501	47,563
Increase	6,375			7,042	1,547
Decrease			.01		

In view of the many obstacles encountered during the year, the above results must be considered as satisfactory, although the slight increase in tonnage and ounces in the total ore reserves was not as great as desired. Every effort will be made further to increase these reserves during 1951.

NOTE: Above tonnage for 1951 is figured on 15 cu. ft. per ton basis, whereas 1950 was based on 14.5 cu. ft. per ton.

Exploration and Development

Footage Driven

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet
1950	3,515	1,559	2,562	7,636
1949	5,029	985	3,519	9,533
Decrease	1,514		957	1,897
Increase		574		

Exploration Crosscuts

30 Level Minita

Crosscut No. 11 (former No. 1) was advanced 233 feet to the East and intersected the Moreno No. 1 and Moreno No. 2 veins. Work in this crosscut has been suspended until the extent and tenor of the ore can be established in the veins lying to the East of the Moreno No. 2 on the 175 level.

Crosscut No. 12 (former No. 2) was driven 39 feet and connected with the Roque adit. Only a minor stringer without values was encountered in this crosscut.

175 Level Zancudo

Crosscut No. 34 (former No. 4) was driven a total of 73 feet West of Drift No. 5 and cut a vein believed to be a branch of the Zancudo. Unfortunately, this vein did not show sufficient values to justify developing at this time.

175 Level Minita

Crosscut No. 35 (former No. 5) was driven a total of 222 feet East from Drift No. 19 on the Minita vein. At a point 185 feet East of this drift a strong vein was cut which has been designated as the Minita No. 3 and which has encouraging prospects. The crosscut has been stopped, but the vein will be actively developed both laterally and vertically during the ensuing year.

175 Level Crosscut No. 31 (Former No. 1)

This crosscut was extended 300 feet Eastward during the year. It cut the Moreno No. 2 vein and lateral development was started both to the North and South. Several minor stringers were intersected East of the Moreno No. 2 vein, but they were of no commercial significance.

Work will be continued in this crosscut during 1951 to cut the numerous veins lying to the East and out-cropping on the surface.

300 Level Crosscut No. 21 (Former No. 1)

An advance of 280 feet was made in this crosscut during the year, and the Moreno No. 1 and Moreno No. 2 veins were cut, as were the several minor stringers which are probably branches of the main vein systems.

Vein Development and Stoping

A total of 59,662 tons of ore was delivered to the mill during the year under review; of this 48,213 tons or 80.81% came from stoping operations while 11,449 tons or 19.19% were produced in development work.

The ore production came from the following veins: Dorado No. 1, Dorado No. 2, Dorado No. 4, Minita No. 1, Minita No. 3, Moreno No. 1, Moreno No. 2, Portillo and Zancudo.

Dorado No. 1

This vein continued to be a major producer during 1950; stoping operations yielded 10,907 tons while 1,173 tons were produced from development, making a total of 12,080 tons.

During the year 94 feet of raises were driven on the 50 level, 157 feet of drifts and 181 feet of raises were driven on the 175 level, and 37 feet of drifts and 96 feet of raises were driven on the 300 level. The results of the development operations on the Dorado vein during the year were somewhat disappointing and reserves were decreased by 7,842 tons leaving a total reserve of 19,496 tons of ore averaging 0.4 ounces silver and 0.19 ounces gold per ton. A diamond drilling program has been planned for 1951 to determine whether or not ore shoots exist in the walls of the drifts. This will apply particularly to those on the 300 level.

Dorado No. 2

Only one raise was advanced 45 feet on this vein from the 300 level. Although some ore was encountered in the raise and 69 tons of ore were produced, the values were spotty and no reserves were blocked out. No lateral work was done on this vein.

Dorado No. 4

No additional development work was done on this vein in 1950. Part of the ore from this vein was removed in conjunction with stoping operations on the Dorado No. 1 vein. A total of 5,646 tons of ore averaging 0.5 ounces silver and 0.18 ounces gold per ton were on reserve at the end of the year.

Minita No. 1

During 1950 the Minita No. 1 vein continued to be the principal ore producer. Of the 25,721 tons produced, 22,163 tons were derived from stopes and 3,558 from development work. Although 562 feet of drifts and 122 feet of raises were driven on the 175 level, very little ore of stoping grade was encountered.

At the end of 1949 the vein in the North heading on the 175 level split into three branches, and during most of 1950 drifting was confined to the two branches which showed the best values at the split. However, the results from these two branches were disappointing. In December of 1950 the third or West branch was opened up and it now appears that this may be the main vein.

The South heading on the 175 level was extended, as waste was needed for fill and passed through a fault. To date no ore of mining grade has been found on the South side of this fault and it is planned to utilize the diamond drill in the hope of locating this vein.

On the 300 level 392 feet of drifts and 659 feet of raises were completed during the year; drifting was confined to the North heading which was following a very strong vein at the end of the year.

Total ore reserves in this vein are 78,666 tons of ore averaging 0.9 ounces silver and 0.25 ounces gold per ton.

Minita No. 3

A promising new vein, the Minita No. 3, was cut by Crosscut No. 35 on the 175 level in October 1950. During the last few months of the year, 206 feet of drifts were driven on this vein which produced 618 tons of ore.

The South Drift is following a strong vein which carries above average grade while the North Drift has encountered only spotty values. However, judging from surface indications, there is reason to believe this drift will also show ore of milling grade.

This vein will be actively developed on both the 175 and 300 levels during the coming year.

A total of 2,016 tons averaging 2.3 ounces of silver and 0.35 ounces of gold was included in ore reserves on this vein.

Moreno No. 1

Little development work was done on this vein during the year. On the 30 level the vein was cut by Crosscut No. 11 and Drift No. 7 was extended about 15 feet north of the crosscut where heavy ground was encountered and the drift temporarily stopped. Work on this heading will be resumed during the next dry season when conditions should be more favorable. On the 175 level a total of 44 feet of drifts was driven, but showed only spotty values. The main crosscut on the 300 level passed through the Moreno No. 1 vein, but preliminary work did not disclose any appreciable values.

A total of 281 tons of ore was produced from the Moreno No. 1 vein during 1950. Development operations accounted for 241 tons of this while the remainder came from stoping.

Moreno No. 2

This vein was cut on the 175 level early in 1950 and 230 feet of drifts and 79 feet of raises were driven on that level. A total of 56 feet of drifts was driven on the 30 level and some values were discovered there. At the end of the year the main vein was cut by the 300 crosscut, but a heavy flow of water has prevented further development until the flow subsides. However, 20 feet of drifts were driven on a narrow footwall branch of this vein with encouraging results. The above development operations produced 1,042 tons of ore.

Ore reserves in this vein and branches at the end of 1950 were estimated to be 2,785 tons of ore averaging 2.0 ounces silver and 0.23 ounces gold per ton.

Development work on this vein will be intensified during the coming year.

Portillo

Development operations on the Portillo in 1950 were quite successful despite narrow width of the vein. Totals of 596 feet of drifts and 299 feet of raises were driven on the 300 level, while 71 feet of drifting was done on the 175 level. Development operations yielded 1,297 tons of ore and 301 tons were produced from stopes.

Reserves totaling 7,938 tons of ore averaging 1.5 ounces silver and 0.29 ounces gold per ton were blocked out during 1950.

Apparently the Portillo No. 1 and Portillo No. 2 veins join between the 300 and 175 levels; the ore seems to follow the Portillo No. 2 branch above the split. To date no ore has been blocked out above the 175 level, but it is believed to exist in the lateral extension of Drift No. 11 on the 175 level. This will be confirmed during 1951.

Zancudo No. 1

Development operations on the Zancudo vein produced 3,426 tons of ore, while 14,816 tons were produced from stopes, thus making a total of 18,242 tons from this vein. On both the 175 and 300 levels heavy ground was encountered under the Zancudo Creek making it necessary to drive the drifts in the footwall of the vein. However, a fair amount of new ore was opened up, 11,771 tons being added to the reserves in addition to that extracted. The reserves now total 83,495 tons of ore averaging 1.1 ounces silver and 0.26 ounces gold per ton. The 30 level drift was advanced 34 feet while 431 feet of drifts and 268 feet of raises were driven on the 175 level and 558 feet of drifts and 651 feet of raises were driven on the 300 level. There are indications that additional tonnages of commercial grade ore will be found during the coming year on both the North and South extensions of this vein.

General

At the beginning of the dry season late in 1950, the main shaft was dewatered to the 425 level and the necessary timbering was done to permit hoisting from that level. It is planned to finish the shaft station and to drive the supply shaft raise to the 300 level during the year. Unless a large amount of new ore is discovered early in the year by development operations on the 175 and 300 levels, a crosscut will be driven to the East to open up the known veins on the 425 level. It is believed that the vein material will be more consolidated on that level and that mining operations will require less timber, which is now one of the largest items of mining expense.

The labor force in the mine was increased numerically in 1950, but there is still a shortage of skilled workers. All efforts will be made to train these inexperienced men as rapidly as possible. The rate at which mine production can be increased will, to a large extent, depend on the success of this training program. For better operating efficiency, it will be necessary to increase broken ore reserves in the mine.

Because both the North and South headings on the Zancudo vein on the 175 level reached the limit of our mineral zones, the necessary actions to secure additional mineral rights were instituted. It is expected that final title to these rights will be obtained in the near future.

A new 650 cu. ft. per minute air compressor will be installed during the early part of 1951 to provide sufficient air for the expanded production. New pumping facilities for the mine will be provided as well as an additional diesel driven generator to augment the present power supply.

Diamond Drill

A small diamond drill was purchased and arrived at the property late in the year. This drill was used to tap the Moreno No. 2 vein ahead of Crosscut No. 21 on the 300 level so the water could drain out gradually. It is believed that this drill will be a great help in the exploration program and a number of holes have been proposed for 1951 including the following:

(1) Holes will be carried ahead of the exploration crosscuts to tap and drain veins before they are cut by the crosscuts, thus decreasing the danger of having large instantaneous flows of water.

(2) Holes East and West from Drift No. 10 on the 300 Zancudo to determine whether or not the drift is on the main Zancudo vein.

(3) A hole West from the face of Crosscut No. 34 on the 175 level to meet a hole drilled east from Drift No. 1 to cut the extension of the vein in Drift No. 3 (Dorado No. 3 vein) and to explore the area between the Dorado and Zancudo veins.

(4) Holes from points near the faces of both Drifts No. 3 and No. 4 on the 300 level Dorado No. 1 vein to determine whether or not ore bodies exist in the walls of these drifts.

(5) A hole East from the vicinity of Station No. 286 in Drift No. 2 on the 175 Zancudo to cut possible branches of the Zancudo and the southern extension of the Dorado No. 1 vein.

(6) Additional holes to be drilled in locations indicated by current development.

Mill

The new mill extension, as mentioned in last year's report, was completed and put into operation in October, 1950. The installation of these facilities did not interrupt milling operations other than causing a tonnage milled decrease during September, when only one ball mill was in the circuit. All new units have operated satisfactorily and the tonnage milled has shown an increase to approximately 255 tons per day operated.

Test runs have indicated that with the circuits as they are now, an average of 300 tons per day could be maintained without any material sacrifice in extraction. However, full utilization of this capacity will be contingent upon the ability of the mine to increase production.

Tonnage Mined Previous to January 1, 1951

Vein	Total Including Stoping & Dev. Previous to December 31, 1949	Total Including Stoping & Dev. for the year 1950	Grand Total Incl. Stoping & Development Jan. 1, 1951
Dorado No. 1	19,037	12,080	31,117
Dorado No. 2	327	80	407
Dorado No. 3	349		349
Minita No. 1	31,928	25,721	57,649
Minita No. 3		618	618
Moreno No. 1	1,057	281	1,338
Moreno No. 2		1,042	1,042
Portillo No. 1	100	1,598	1,698
Portillo No. 2	62		62
Potrero	159		159
Zancudo No. 1	13,367	18,242	31,609
Zancudo No. 2	299		299
TOTALS	66,685	59,662	126,347

Total Production to Date

Net Troy Ounces Previous to December 31, 1949		Net Troy Ounces For Year 1950		Total Net Troy Ounces to January 1, 1951	
Ag.	Au.	Ag.	Au.	Ag.	Au.
72,143	14,638	59,598	13,479	131,741	28,117

Summary to January 1, 1951

From Stoping	81,751
From Development	44,596
TOTALS	126,347

Conclusion

It is with great pleasure that I take this opportunity to thank each member of the staff at Rosario, El Mochito and El Dorado for his cooperation and loyalty during the year. I would also like to acknowledge the helpful assistance of the Officers of the company, the Board of Directors and all of the departments of the New York office.

Respectfully submitted,

F. H. STEPHENS
General Manager.

ANNEX "A"—ACTIVE ORE RESERVES FOR 1950

Estimated Reserves (13 & 14 Cu. Ft. Per Ton)	Avg. Vein	Width Waste	Feet Stope	Tons Ore & Waste	Avg. Troy Ozs. per ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Independencia Group								
Independencia—1	2.27	1.32	3.59	3,408	10	.04	34,579	141
Independencia—3	0.96	1.54	2.50	433	7	.04	2,822	18
Independencia—4	2.69	1.31	4.00	1,036	21	.03	21,595	35
San Blas—2	0.99	1.80	2.79	7,234	9	.08	68,265	599
Salvador Group								
Fortuna North	1.73	1.36	3.09	5,720	16	.02	93,972	105
Jucuara—1 (Fortuna)	2.28	1.70	3.98	37,841	22	.05	826,052	1,807
Salvador	1.21	1.79	3.00	6,153	11	.04	64,751	263
Jucuara Group								
56 Fault Vein	2.30	1.70	4.00	1,286	9	.09	11,863	119
Jucuara—2	2.50	1.58	4.08	14,970	12	.15	186,468	2,287
Jucuara—3	1.65	1.75	3.40	5,474	5	.09	27,664	515
Jucuara—4	1.46	2.04	3.50	14,130	21	.07	301,168	1,029
Jucuara—12	1.12	1.88	3.00	2,185	10	.07	22,032	147
Santa Fe Group								
San Benito—1	1.17	1.83	3.00	4,508	15	.16	67,880	709
San Benito—2	2.06	1.19	3.25	17,871	18	.23	316,957	4,054
Santa Fe Main	2.98	1.02	4.00	1,316	9	.06	12,470	82
Santa Fe—1	2.35	1.35	3.70	5,444	10	.17	53,561	930
Santa Fe—2	2.57	2.43	5.00	40,413	48	.47	1,948,765	18,980
Santa Fe—3	2.03	1.97	4.00	2,040	7	.06	14,616	128
Santa Fe—4	3.00	1.78	4.78	112,963	16	.18	1,792,621	20,619
Santa Fe—7	1.35	1.65	3.00	877	7	.13	6,221	116
San Luis—2	1.09	1.91	3.00	1,431	15	.09	21,320	135
Old Mine Group								
Candelaria Branch—1	1.18	1.82	3.00	2,031	6	.07	11,985	144
Candelaria Branch—2	1.32	1.68	3.00	14,183	9	.06	131,161	860
Capitana—1	0.76	2.24	3.00	6,102	5	.16	27,746	949
Capitana—2	1.14	1.36	2.50	3,709	5	.10	19,969	363
Catalina—2	1.20	1.80	3.00	5,603	13	.01	71,800	81
Colonia—1	1.34	2.02	3.36	21,271	14	.19	291,692	4,062
Colonia—3	1.51	1.49	3.00	1,121	7	.10	7,900	107
Crisanta—1	1.06	1.94	3.00	2,862	8	.02	23,657	55
Crisanta—2	0.62	2.38	3.00	1,625	13	.03	21,168	49
Culebra—1	1.50	1.50	3.00	4,457	18	.07	79,396	332
Culebra—2	1.58	1.45	3.03	8,901	16	.06	139,398	563
Culebra Stringer	1.06	1.75	2.81	3,413	10	.03	33,042	109
Esperanza	0.91	2.09	3.00	7,974	11	.03	87,372	232
Guadalupe	1.86	1.14	3.00	2,727	12	.09	33,415	255
Northwest—1	1.68	1.59	3.27	8,118	9	.09	72,253	758
Northwest—2	1.32	1.68	3.00	2,632	7	.08	19,405	219
Northwest—3	1.35	1.65	3.00	6,823	13	.10	90,373	674
Northwest—4	1.24	1.76	3.00	5,209	12	.05	65,109	286
Nueva	1.31	1.69	3.00	987	11	.12	11,232	119
Nueva Branch—1	1.14	1.86	3.00	2,320	8	.13	18,582	310
Porvenir	1.20	1.80	3.00	7,572	9	.02	66,916	155
Rosario—1	3.98	1.02	5.00	885	30	.10	26,752	92
Rosario—2	1.99	1.01	3.00	5,467	8	.10	41,894	545
Rosario Stringer—1	1.36	1.74	3.10	9,484	12	.05	115,806	531
San Joaquin	1.14	1.86	3.00	9,698	10	.16	99,226	1,520
South San Miguel	1.58	1.42	3.00	3,583	13	.05	47,782	185
Southwest—1	1.56	2.44	4.00	503	23	.06	11,760	29
Termópilas	1.20	1.30	2.50	785	7	.04	5,768	31
West	1.66	1.84	3.50	2,692	6	.11	17,189	306
Other Veins								
Santa Gertrudis—1	1.44	2.06	3.50	1,804	10	.02	18,698	33
Santa Gertrudis—2	1.56	1.44	3.00	946	7	.05	6,642	49
Veta—4 North	1.19	1.60	2.79	3,112	10	.02	30,675	61
Veta—4 South	1.57	1.48	3.05	21,063	18	.03	370,354	579
TOTAL—Forward				466,395	17.17	.1446	8,011,759	67,461

ANNEX "A"—*Continued*

Estimate of Broken Ore in Stopes & Ore Passes
(21 cu. ft. per ton)

VEIN	Tons Ore & Waste	Avg. Troy Ozs. Ag.	Au.	Total Troy Ozs. Ag.	Au.
Forwarded	466,395	17.17	.1446	8,011,759	67,461.
Catalina—2	1,331	17	.02	22,627	26.6
Colonia—1	48	10	.07	480	3.4
Colonia—1	521	12	.09	6,252	46.9
Colonia—1	675	8	.06	5,400	40.5
Culebra—1	244	12	.02	2,928	4.9
Culebra—1	185	15	.02	2,775	3.7
Culebra—1	1,333	15	.06	19,995	80.0
Culebra—2	542	20	.04	10,840	21.7
Culebra—2	242	20	.12	4,840	29.0
Culebra Stringer	295	10	.01	2,950	3.0
Jucuara—1 Br. 3	8	8	.08	64	0.6
Jucuara—1 Br. 3	214	6	.10	1,284	2.1
Jucuara—1 Main	563	10	.01	5,630	5.6
Jucuara—1 Br. 2	1,041	15	.02	15,615	20.8
Jucuara—1 Main	1,141	10	.01	11,410	11.4
Jucuara—3	70	15	.02	1,050	1.4
Northwest—1	2,286	13	.14	29,718	320.0
Northwest—3	1,016	15	.10	15,240	101.6
Northwest—3	47	10	.06	470	2.8
Rosario Stringer—1	316	7	.04	2,212	12.6
Salvador	870	9	.01	7,830	8.7
San Benito—1 Br. 1	185	10	.10	1,850	18.5
San Benito—2	717	30	.35	21,510	251.0
San Benito—2	1,402	20	.25	28,040	350.5
San Benito—2 Br. 1	176	5	.05	880	8.8
San Blas—2	138	6	.05	828	6.9
Santa Fe—1	804	12	.07	9,648	56.3
Sante Fe—1 Br.	100	7	.03	700	3.0
Santa Fe—2	1,136	24	.23	27,264	261.3
Santa Fe—2 Br. 3	1,339	12	.05	16,068	67.0
Santa Fe—2 Br. 4	126	10	.06	1,260	7.6
Santa Fe—2 Br. 4	332	15	.10	4,980	33.2
Santa Fe—4	49	6	.05	294	2.4
Santa Fe—4	63	10	.09	630	5.7
Santa Fe—4 Br. 1	183	15	.13	2,745	23.8
Santa Fe—4	907	10	.12	9,070	108.8
Santa Fe—4 Br.	32	10	.12	320	3.8
Santa Fe—4	1,776	25	.30	44,400	532.8
Santa Fe—4	985	25	.30	24,625	295.5
Santa Fe—4	5,556	28	.30	155,568	1,666.8
Santa Fe—4	144	10	.12	1,440	17.3
Santa Fe—4	396	10	.12	3,960	47.5
Santa Fe—5	541	10	.05	5,410	27.1
Santa Fe—7	328	12	.12	3,936	39.4
Veta—4—North	875	7	.03	6,125	26.2
Veta—4—South	3,626	15	.03	54,390	108.8
Veta—4—South	99	5	.01	495	1.0
Ore in Ore Passes	1,808	14	.085	25,312	153.7
Ore in Mill Bin	545	12	.08	6,540	43.6
	37,356	16.81	.1316	627,898	4,915.6
TOTAL ACTIVE RESERVE	503,751	17.15	.1437	8,638,657	72,377.

ANNEX "B"—INACTIVE ORE RESERVES

Estimated Reserves at 13 cu. ft. per ton

	Avg. Vein	Width Waste	Feet Stope	Tons Ore & Waste	Avg. Ozs. per Ton Ag.	Au.	Total Ozs. Ag.	Au.
Candelaria Main	1.49	1.78	3.27	4,943	6	.08	29,430	397
Nueva	0.88	2.12	3.00	4,500	9	.09	40,468	401
Santa Fe—2	2.15	1.35	3.50	1,419	6	.06	8,200	82
North San Miguel	1.60	1.90	3.50	1,831	12	.05	22,134	95
South San Miguel Str.	0.98	2.02	3.00	3,780	8	.05	32,110	185
TOTAL				16,473	8.03	.0704	132,342	1,160

Note on Reserves

While it is inherently probable that the tonnages and grades, when actually mined from these individual veins, will vary somewhat from these estimates, it is expected that the sum totals will show a very close approximation to the estimate.

Annex "C"—Tonnage Mined from October 1, 1907 to January 1, 1951

Veins	Total Including Stoping, Devel. and Fill Oct. 1, 1907—Dec. 31, 1949	Total Including Stoping, Devel. and Fill Year 1950	Grand Total Including Stoping, Devel. and Fill To January 1, 1951
Buena Ventura	101,455	.....	101,455
Candelaria Group	178,124	6,492	184,616
Capitana—1	60,967	.....	60,967
Capitana—2	1,210	10	1,220
Carmen—1	66,905	316	67,221
Carmen—2	2,470	.....	2,470
Catalina—1	6,587	.....	6,587
Catalina—2	5,201	2,450	7,651
Colonia—1	165,823	5,108	170,931
Colonia—2	2,217	.....	2,217
Colonia—3	2,459	720	3,179
Concepción	19,342	.....	19,342
Crisanta—1	18,757	.....	18,757
Crisanta—2	435	924	1,359
Crisanta—3	1,371	970	2,341
Culebra—1	145,076	6,669	151,745
Culebra—2	30,162	4,735	34,897
Culebra Stringer	55,856	4,307	60,163
Esperanza	8,710	.....	8,710
Fortuna Group	111,224	674	111,898
Guadalupe	63,288	.....	63,288
Independencia	313,049	2,807	315,856
Jucuara—1 (Fortuna)	511,833	11,084	522,917
Jucuara—2	368,690	12,397	381,087
Jucuara—3	55,380	2,449	57,829
Jucuara—4	92,223	5,559	97,782
Jucuara—5	3,054	.....	3,054
Jucuara—6	4,541	.....	4,541
Jucuara—7	7,713	1,214	8,927
Jucuara—8	8,562	.....	8,562
Jucuara—9	36,590	.....	36,590
Jucuara—10	4,558	.....	4,558
Jucuara—12	2,371	792	3,163
Jucuara—13	6,560	589	7,149
56 Fault Vein	12,450	3,681	16,131

ANNEX "C"—*Continued*

Veins	Total Including Stoping, Devel. and Fill Oct. 1, 1907—Dec. 31, 1949	Total Including Stoping, Devel. and Fill Year 1950	Grand Total Including Stoping, Devel. and Fill To January 1, 1951
North	4,647	.....	4,647
Northwest Group	104,250	7,963	112,213
Nueva Group	36,816	2,380	39,196
Porvenir	3,112	80	3,192
Rosario Main	161,834	1,407	163,241
Rosario—2	641	.....	641
Rosario Stringer—1	7,324	6,423	13,747
Rosario Stringer—2	2,993	.....	2,993
Salvador	831,286	6,704	837,990
San Benito—1	145,704	2,920	148,624
San Benito—2	53,109	3,830	56,939
San Blas—1	9,083	.....	9,083
San Blas—2	22,730	4,042	26,772
San Joaquin	71,649	145	71,794
San Luis	2,613	1,801	4,414
San Miguel North	176,157	.....	176,157
San Miguel South Group	147,442	762	148,204
San Vicente	1,289	.....	1,289
Santa Fe Main	193,669	8,572	202,241
Santa Fe—1	83,528	804	84,332
Santa Fe—2	99,012	4,224	103,236
Santa Fe—3	52,566	2,667	55,233
Santa Fe—4	18,579	16,009	34,588
Santa Fe—5	1,116	592	1,708
Santa Fe—7	.....	1,362	1,362
Santa Gertrudis—1	78,576	125	78,701
Santa Gertrudis—2	5,568	1,278	6,846
Socorro	22,592	.....	22,592
Southwest—1	141,018	7,393	148,411
Southwest—2	26,483	.....	26,483
Southwest—3	14,104	3,011	17,115
Southwest—4	10,237	.....	10,237
Southwest—5	25,261	3,001	28,262
Southwest—6	10,083	.....	10,083
Southwest—7	9,804	.....	9,804
Southwest—8	581	.....	581
Southwest—9	6	.....	6
Southwest—10	14,113	.....	14,113
Southwest—11	600	.....	600
Southwest—12	2,737	.....	2,737
Termópilas	13,202	93	13,295
West	98,749	1,915	100,664
Veta—4—North	27,005	6,348	33,353
Veta—4—South	36,475	5,919	42,394
Ore from Development	63,599	.....	63,599
Miscellaneous (Fills)	92,683	21,181	113,864
TOTALS	5,399,838	196,898	5,596,736

NEPTUNE GOLD MINING COMPANY

Annual Report for the Year 1950

To the Shareholders:

Summary of the report of Mr. C. E. Nelson, General Manager, for the calendar year 1950, is as follows:

"As mentioned in the annual report for 1949 the height of the storage dam at the Siempre Viva hydro-electric power plant was raised to give increased water storage. As a result no delays to operations were experienced during the dry season of 1950 due to lack of power. The ability to operate the mines and mill without interruption enabled lower operating costs to be attained as compared with previous years.

During 1950, 14,309 feet of development work were accomplished in the Neptune group of mines, of which 9,903 feet, or 69.4 percent were in ore. In addition, 4,058 feet of diamond drilling were completed.

Production figures for the year 1950 compared with 1949 are:

			Contents of Bullion Produced and Shipped	
Year	Tons Milled	Average Ozs. Gold per Ton	Ozs. Gold	Ozs. Silver
1950	260,129	0.303	71,961	76,122
1949	252,560	0.288	66,112	83,713

In the Neptune group of mines the estimated total of assured, probable and prospective ore as of December 31, 1950 is 1,296,220 tons, averaging 0.287 ounces gold per ton.

Since May 26, 1945 the property of the Compania Minas Matagalpa has been operated under a profit-sharing agreement under which that company received 30 percent of the profits. This agreement was terminated on March 31, 1950 as it was no longer possible to operate this small low grade property at a profit.

During the period January 1, 1950 until March 31, 1950 there were milled at Matagalpa 8,250 tons assaying 0.168 ounces gold. Production from this tonnage amounted to 1,159 ounces gold and 1,847 ounces silver."

The Directors take this opportunity to congratulate Mr. Nelson and his staff on the results achieved during the year.

On January 1, 1950 there were outstanding $800,000 par value Ten Year Five Percent Notes. On April 1, 1950, $400,000 of this principal amount were paid at par with accrued interest. The balance of $400,000 par value was paid at par with accrued interest on December 22, 1950.

The earnings from mine operations of the Company for the year 1950 before income charges and provisions for depreciation and depletion were $709,579.58. Of this amount, $699,173.43 was earned at the Neptune group of mines, and the balance of $10,406.15 at Matagalpa.

Balance Sheet as of December 31, 1950 and Statement of Income and Surplus for the year 1950 are embodied in this report.

Respectfully submitted,

R. F. GOODWIN,
President.

March 12, 1951.

NEPTUNE GOLD MINING COMPANY

Balance Sheet as of December 31, 1950

Assets

Current Assets:		
Cash on hand and in banks		$ 499,694.55
Unliquidated bullion (conservatively valued based on mine assay)		441,536.09
Accounts receivable		117,875.53
Materials and supplies — including construction materials (at average cost)		906,524.41
TOTAL CURRENT ASSETS		$1,965,630.58
Unexpired Insurance		26,833.41
Mining Property, Options, Preproduction Costs, Buildings and Equipment — at cost	$3,994,727.15	
Less reserves for depreciation and depletion	2,822,224.44	1,172,502.71
TOTAL		$3,164,966.70

Liabilities

Current Liabilities:	
Accounts and drafts payable	$ 119,022.76
Accrued payrolls and other expenses	51,221.22
Accrued U. S. income tax	41,991.18
TOTAL CURRENT LIABILITIES	$ 212,235.16
Employer's Liability Reserve	19,936.06
Capital Stock (without par value) — authorized and outstanding 20,000 shares	10,000.00
Surplus	2,922,795.48
TOTAL	$3,164,966.70

NEPTUNE GOLD MINING COMPANY

Statement of Income and Surplus
For the Year ended December 31, 1950

Value of bullion produced, less marketing expenses		$2,716,436.15
Operating and general expenses		2,006,856.57
Earnings from mine operations		$ 709,579.58
Provisions for depreciation and depletion		290,879.56
Gross income		$ 418,700.02
Income charges:		
Interest on ten year, five per cent notes (notes redeemed during 1950)	$24,531.96	
U. S. income tax	27,500.00	52,031.96
Net income		$ 366,668.06
Surplus, January 1, 1950		2,556,127.42
Surplus, December 31, 1950		$2,922,795.48

AUDITORS' CERTIFICATE

Neptune Gold Mining Company:

We have examined the balance sheet of Neptune Gold Mining Company as of December 31, 1950 and the related statement of income and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statement of income and surplus present fairly the financial position of the Company at December 31, 1950 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

HASKINS & SELLS

New York
March 1, 1951

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SEVENTY-SECOND ANNUAL REPORT

NINETEEN HUNDRED AND FIFTY-TWO

NEW YORK AND HONDURAS ROSARIO MINING COMPANY

OFFICERS

WM. A. PRENDERGAST, *President*
LEWIS L. CLARKE, *Chairman of the Board of Directors*
R. M. REININGER *Executive Vice-President*
RICHARD F. GOODWIN, *Vice-President*
W. C. LANGLEY, *Treasurer*
J. PERLMAN, *Secretary*

BOARD OF DIRECTORS

LEWIS L. CLARKE, *Chairman*
JULIAN B. BEATY
RICHARD F. GOODWIN
DR. J. RALPH JACOBY
HERBERT A. KAUFMANN
W. C. LANGLEY
LESTER S. OPPENHEIMER
WM. A. PRENDERGAST
M. F. SOTO
RICHARD H. VALENTINE

PRESIDENT'S REPORT

March 20, 1953

To the Stockholders of the
New York and Honduras Rosario Mining Company

We take pleasure in conveying through this report to the Governments of Honduras and El Salvador our cordial good wishes for the prosperity and happiness of their peoples.

The details of our operations for the past year are set forth in the Report of the General Manager of the Rosario and El Mochito properties and the General Manager of the El Dorado property.

Rosario Property

In my report covering the year 1951, and the first two months of 1952, (dated March 20, 1952), it was stated (p. 3) that the General Manager's report for 1951 showed "that for two successive years there have been material decreases in reserves (Rosario), indicating a shortening in the life of the mine unless some entirely new ore bodies are discovered by our Exploration Program."

The report of the General Manager for the year 1952, herewith submitted in full (pages 13 to 34 & pages 39 to 42) indicates that the Rosario Exploration Program has shown only minor additions to the reserves, and that at the end of the year there had been a diminution in the reserves of 166,690 tons of ore, and a decrease in the silver content of 2,751,448 ounces, and in gold of 23,146 ounces.

That the foregoing condition is not an abrupt occurrence in our experience over recent years is shown by the following table of assured and probable ore reserves as of January 1st, for the following years:

	Tons	Silver Ounces	Gold Ounces
1949	668,440	10,787,255	80,088
1950	632,698	10,520,465	84,457
1951	503,751	8,638,657	72,377
1952	342,809	6,882,113	55,923
1953	176,119	4,130,665	32,777

On the foregoing basis of ounce consumption it is, therefore, apparent that the supply of ounces of silver and gold, as of January 1, 1953, represents about a normal consumption of one and one half years, and that except in the event of unexpected additions of ore through our Rosario Exploration Program, on which no reliance is at present justified, the Rosario mine will have reached a stage of unprofitable operation during the year 1954.

El Mochito

The General Manager has given in his report (pages 23 to 30) an excellent picture of the conditions at this property, the favorable nature of which was interrupted in September by a cloudburst, from the effects of which, as well as other interruptions of service, full recovery was not made until the end of the year. The complete picture, however, is satisfactory.

El Dorado

By the early Fall of 1952 it became evident that the program of further development had not produced any particular gains, and it was decided to realize all possible advantages from the remaining ore reserves, and discontinue operations. This plan has been followed, but its consummation delayed, subject to a further investigation of the property now in contemplation.

Expansion Program

This program was initiated as of January 1, 1952, and pursued actively during the year. A description of the properties upon which work has been done is given in the General Manager's report (pages 30 to 34).

Because of difficulties that might arise regarding the treatment of expenses incurred upon this work under the new Income Tax Law of Honduras, work has been suspended upon all of them for the present.

No definite results as to any of these properties will be available until further work has been done.

Fiscal Policies Affecting Our Operations

In my report for the year 1951 it was stated:

> "The Honduras Government in 1949, adopted an Income Tax Law covering business concerns and individuals, which raises the tax upon this Company's business from 7%, the figure agreed upon in our latest concession (Decree 67 — 1940-1960), to a maximum of 15%. The earliest year under which we would be liable is 1950, and in view of the fact that the Government of Honduras refuses to recognize another provision of our present concession, viz., in computing the tax due them, to accept the same bases established by the Income Tax Laws of the United States of America, the amount of the tax for the year 1950 is still open for settlement."

There are now unsettled amounts claimed to be due under the Honduras Income Tax Law for the years 1950, 1951 and 1952. Negotiations with the Government are now in progress, but without conclusive results. What we believe to be suitable

reserves covering these differences have been included in our financial statements

Other Properties

El Tránsito

We have a present investment in this property of $69,205.40. Other disposition being found impossible, it will be offered for sale during 1953.

Financial

The reports on this element of our corporate status are of a satisfactory nature and your study of them is earnestly invited.

New Officer — Executive Vice President

Acting under authority of Section 1, of Article IV of the By-Laws of this Company, the Board of Directors on November 12, 1952, created the office of Executive Vice President, and elected thereto Mr. R. M. Reininger, who has been with the Company on our Honduras and New York staffs a period of fourteen years.

Neptune Gold Mining Company

In accordance with our custom, we present the Annual Report of this Company on pages 43 to 46 of this report.

Respectfully submitted,

WM. A. PRENDERGAST,
President.

Report of Auditors

To the Stockholders of
New York and Honduras Rosario Mining Company:

We have examined the consolidated balance sheet of New York and Honduras Rosario Mining Company and subsidiary, as of December 31, 1952, and the related statement of consolidated income and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records, and such other auditing procedures, at offices in New York and at the mines, as we considered necessary in the circumstances, including examination of minutes of Stockholders and Directors' meetings.

In our opinion, the accompanying balance sheet and statement of income and surplus present fairly the consolidated financial position of New York and Honduras Rosario Mining Company and subsidiary, at December 31, 1952, and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST

New York, N. Y.
March 16, 1953

CONSOLIDATED

New York and Honduras Rosario

DECEMBER

ASSETS

CURRENT ASSETS		
Cash		$ 947,636.85
Bullion at smelters and at mines — at realizable values less allowance for expenses		715,204.82
Marketable securities — at cost (aggregate quoted market $1,416,479.15)		
United States Government obligations	$ 647,943.29	
Municipal Housing Authorities temporary loan notes	400,071.18	
Domestic corporation stocks	182,777.18	
	$1,230,791.65	
Interest accrued on bonds	6,254.85	$1,237,046.50
Accounts receivable		194,934.79
Broken ore in stopes and mill bins — at cost		213,967.64
Inventories — material and supplies — at purchased cost not in excess of replacement cost, less allowance of $120,000.00		1,102,806.61
TOTAL CURRENT ASSETS		$4,411,597.21
INVESTMENTS AND OTHER ASSETS		
Neptune Gold Mining Company — 5,610 shares of capital stock of no par value — at cost — See note	$ 2,621.40	
United States Government obligations 2¾% Treasury Bonds due April 1, 1980-75 — at cost	311,140.63	313,762.03
PREPAID ITEMS, ETC.		
Deferred exploration costs	$ 137,998.42	
Prepaid insurance, taxes and other expenses	60,035.30	198,033.72
BUILDINGS, MACHINERY, AND EQUIPMENT		
At cost	$4,618,954.82	
Less allowances for depreciation	3,649,957.58	968,997.24
MINES, REAL ESTATE, AND CONCESSIONS		
At valuation originally established in 1880 ($1,500,000) plus additions at cost	$1,959,398.72	
Less allowances for depletion	1,916,167.09	
	$ 43,231.63	
Costs and expenses to date on properties not in operation	83,023.55	126,255.18
		$6,018,645.38

NOTE—The Company's equity in the net assets of the Neptune Gold Mining Company (as shown in its annual report for the year 1952) exceeds the cost of investment in stock by approximately $825,800.00 and the equity in its net income for the year was approximately $71,500.00. Dividends received from that company in 1952 amounted to $78,540.00.

BALANCE SHEET

Mining Company and Subsidiary

31, 1952

LIABILITIES

CURRENT LIABILITIES

Accounts payable			$ 109,407.31
Drafts payable			7,580.06
Accrued expenses			52,644.87
Provision for current and prior years taxes on income — estimated			471,807.34
			$ 641,439.58

CAPITAL STOCK AND SURPLUS

Capital Stock (par value $10.00 per share):			
Authorized	188,367 shares	$1,883,670.00	
Less in treasury	2,735 shares	27,350.00	
Outstanding	185,632 shares	$1,856,320.00	
Earned surplus		3,520,885.80	5,377,205.80
			$6,018,645.38

STATEMENT OF CONSOLIDATED INCOME AND SURPLUS

New York and Honduras Rosario Mining Company and Subsidiary

	YEAR ENDED		
	December 31, 1952	December 31, 1951	Increase (Decrease)
Production of metals	$4,659,192.10	$4,287,177.91	$ 372,014.19
Less freight and other expenses on metals	222,361.94	194,233.26	28,128.68
OPERATING INCOME	$4,436,830.16	$4,092,944.65	$ 343,885.51
Operating expenses — (including allowances for depreciation of $515,862.42 — 1952; and $419,791.68 — 1951)	3,093,342.60	2,861,773.16	231,569.44
	$1,343,487.56	$1,231,171.49	$ 112,316.07
New York Administrative and general expenses	184,109.70	186,134.33	(2,024.63)
	$1,159,377.86	$1,045,037.16	$ 114,340.70
Add income from investments, etc. — See Note	150,421.86	132,906.53	17,515.33
	$1,309,799.72	$1,177,943.69	$ 131,856.03
Less other deductions from income: Prospecting and exploration	55,202.86	42,585.12	12,617.74
Sundry	7,700.66	10,151.12	(2,450.46)
	$ 62,903.52	$ 52,736.24	$ 10,167.28
	$1,246,896.20	$1,125,207.45	$ 121,688.75
Depletion	47,581.98	112,130.72	(64,548.74)
PROFIT BEFORE TAXES ON INCOME	$1,199,314.22	$1,013,076.73	$ 186,237.49
Taxes on income — estimated	212,800.00	114,750.00*	98,050.00
NET PROFIT	$ 986,514.22	$ 898,326.73	$ 88,187.49
Special Charges:			
*Abandonment of mining properties during the year 1951 $225,502.94 less tax saving of $48,750.00 (deduction from above)	—o—	176,752.94	(176,752.94)
Provision for possible loss in supplies inventories	120,000.00	—o—	120,000.00
Provision for additional taxes on income for prior years — estimated	243,500.00	—o—	243,500.00
	$ 363,500.00	$ 176,752.94	$ 186,747.06
NET PROFIT AFTER SPECIAL CHARGES	$ 623,014.22	$ 721,573.79	($ 98,559.57)
Earned surplus beginning of year	3,445,485.98	3,327,216.19	118,269.79
	$4,068,500.20	$4,048,789.98	$ 19,710.22
Less dividends declared (amount per share $2.95 for 1952 and $3.25 for 1951)	547,614.40	603,304.00	(55,689.60)
	$3,520,885.80	$3,445,485.98	$ 75,399.82

NOTE — See note to accompanying balance sheet.

SECURITIES

New York and Honduras Rosario Mining Company and Subsidiary
December 31, 1952

MARKETABLE SECURITIES (Included in Current Assets)	Principal Amount	At Cost	Quoted Market
UNITED STATES GOVERNMENT SECURITIES			
Savings bonds: 2½% Defense Series "G" due May 1, 1953	$ 50,000.00	$ 50,000.00	$ 49,750.00
2½% Defense Series "G" due January 1, 1955	100,000.00	100,000.00	97,600.00
United States Treasury bills — due 1953	500,000.00	497,943.29	498,396.39
MUNICIPAL HOUSING AUTHORITIES — TEMPORARY LOAN NOTES — Payment of principal and interest guaranteed by the United States Government.			
.98% New York City Housing Authority due February 20, 1953	150,000.00	150,036.09	150,000.00
1.02% Puerto Rico Housing Authority due February 20, 1953	50,000.00	49,989.48	50,000.00
1.13% Puerto Rico Housing Authority due September 18, 1953	200,000.00	200,045.61	200,000.00
STOCKS	No. of shares		
American Chicle Company, common stock, no par	1,200	18,460.00	58,500.00
California Water Service Co., common stock, par value $25.00 per share	250	8,625.00	8,125.00
Carolina Power and Light Company, common stock, no par	825	25,875.00	33,309.38
The Home Insurance Co., New York, capital stock, par value $5.00 per share	1,000	32,435.70	42,500.00
Indiana Gas and Water Co., Inc., common stock, par value $10.00 per share	100	1,584.45	2,325.00
Iowa Southern Utilities Company of Delaware, common stock, par value $15.00 per share	1,500	26,339.29	29,212.50
Public Service Co. of Indiana, Inc., common stock, no par	550	4,108.47	19,043.75
San Jose Water Works, common stock, par value $25.00 per share	250	10,000.00	7,812.50
Socony Vacuum Oil Co., capital stock, par value $15.00 per share	561	8,393.50	21,107.63
Standard Oil Company of California, capital stock, no par	1,102	18,750.00	65,293.50
Standard Oil Company of New Jersey, capital stock, par value $25.00 per share	1,074	28,205.77	83,503.50
		$1,230,791.65	$1,416,479.15

SECURITIES (Included in Investments and other assets)	Principal Amount	
United States Government obligations 2¾% Treasury Bonds due April 1, 1980-75	$ 307,000.00	311,140.63*
TOTAL SECURITIES		$1,541,932.28

* These bonds may be exchanged for 1½% Marketable Treasury Bills.

ROSARIO

	YEAR ENDED December 31, 1952	December 31, 1951
Number of men employed per working day	1,043	1,094
Tons of ore mined	190,123	194,033
Tons of ore milled	187,200	193,900
Average tons milled per day, full running time	534	551
Ounces of silver recovered	2,709,081	2,145,602
Number of ounces of silver recovered per ton of ore	14.47	11.07
Silver recovered — percentage	91.24%	90.33 %
Sales value of silver recovered	$2,285,642	$1,915,631
Average sales value of silver per ounce	$ .84	$ .89
Average cost of silver per ounce (A)	$ .46	$ .55
Average profit on silver per ounce (A)	$ .38	$ .34
Average sales value of silver recovered per ton of ore	$ 12.21	$ 9.88
Average cost of silver per ton of ore (A)	$ 6.61	$ 6.05
Average profit on silver recovered per ton of ore (A)	$ 5.60	$ 3.83
Ounces of gold recovered	18,793.79	15,282.54
Number of ounces of gold recovered per ton of ore	.10	.079
Gold recovered — percentage	93.78%	93.41 %
Sales value of gold recovered	$ 704,852	$ 610,127
Average sales value of gold per ounce	$ 37.50	$ 39.23
Average sales value of gold recovered per ton of ore	$ 3.76	$ 3.15
Ratio of gold to silver	1:144	1:140
Pounds of lead recovered		
Number of pounds of lead recovered per ton of ore		
Lead recovered — percentage		
Sales value of lead recovered		
Average sales value of lead per pound		

(A) After credit for sales value of gold and lead.

STATISTICS

Rosario Mining Company

MINE	EL MOCHITO MINE		
	YEAR ENDED		
Increase (Decrease)	December 31, 1952	December 31, 1951	Increase (Decrease)
(51)	309	310	(1)
(3,910)	40,941	42,507	(1,566)
(6,700)	41,921	41,903	18
(17)	118	121	(3)
563,479	994,831	1,027,602	(32,771)
3.40	23.66	24.48	(.82)
.91%	80.76 %	82.70 %	(1.94 %)
$370,011	$ 841,169	$ 915,816	($ 74,647)
($ .05)	$ .84	$ .89	($ .05)
($ .09)	$ .54	$ .46	$ .08
$ .04	$ .30	$ .43	($ .13)
$ 2.33	$ 20.01	$ 21.82	($ 1.81)
$ .56	$ 12.83	$ 10.34	$ 2.49
$ 1.17	$ 7.18	$ 10.48	($ 3.30)
3,511.25	820.07	700.48	119.59
.021	.020	.017	.003
.37%	84.18 %	84.28 %	(.10 %)
$ 94,725	$ 29,755.84	$ 26,259.00	$ 3,496.84
($ 1.73)	$ 36.28	$ 37.49	($ 1.21)
$ .61	$ .71	$ .63	$ .08
1:4	1:1212	1:1467	(1:255)
	1,186,533	999,951	186,582
	28.22	23.82	4.40
	41.25 %	43.47 %	(2.22 %)
	$ 164,064	$ 159,675	$ 4,389
	$ .14	$ .16	($ .02)

OPERATING STATISTICS

New York and El Salvador Mining Company, Inc.

(El Dorado Mine)

	YEAR ENDED		
	December 31, 1952	December 31, 1951	Increase (Decrease)
Number of men employed per working day	530	565	(35)
Tons of ore mined	63,720	68,864	(5,144)
Tons of ore milled	61,560	62,711	(1,151)
Average tons milled per day, full running time	244	257	(13)
Ounces of gold recovered	15,086.89	14,910.46	176.43
Number of ounces of gold recovered per ton of ore	.33	.24	.09
Gold recovered — percentage	87.11%	89.99%	(2.88%)
Sales value of gold recovered	$565,114.62	$593,000.28	($ 27,885.66)
Average sales value of gold per ounce	$ 37.46	$ 39.77	($ 2.31)
Average cost of gold per ounce (A)	$ 57.00	$ 51.29	$ 5.71
Average profit or (loss) on gold per ounce (A)	($ 19.54)	($ 11.52)	$ 8.02
Average sales value of gold recovered per ton of ore	$ 9.18	$ 9.46	($ .28)
Average cost of gold per ton of ore (A)	$ 13.97	$ 12.19	$ 1.78
Average profit or (loss) on gold recovered per ton of ore (A)	($ 4.79)	($ 2.73)	$ 2.06
Ounces of silver recovered	79,356.05	74,736	4,620.05
Number of ounces of silver recovered per ton of ore	1.29	1.19	.10
Silver recovered—percentage	82.79%	80.92%	1.87%
Sales value of silver recovered	$ 66,890.72	$ 66,669.18	$ 221.54
Average sales value of silver per ounce	$ .84	$ .89	($ .05)
Ratio of silver to gold	5.26:1	5.01:1	.25:1

(A) After credit for sales value of silver.

GENERAL MANAGER'S REPORT

January 1, 1953

To the Officers and Directors of the
New York and Honduras Rosario Mining Company
120 Broadway
New York, New York

Gentlemen:

The operating results for the year 1952 and the present condition of your properties in Honduras, Central America, are set forth below:

THE ROSARIO MINE (HONDURAS)

The ore reserves are classified for 1953 as Assured and Possible. The Assured blocks are those that have been developed on four sides by drifts and raises. The blocks that were classified as Probable in 1952 are now combined with the Possible, and only Possible will be shown under this category for 1953. Possible ore blocks are those that have not been sufficiently developed to be classified as Assured or that are inaccessible at the present time.

For this report, only Assured and Possible ore with a value above $8.75 per ton is being used, based on silver at $0.75 and gold at $35.00 per troy ounce. Annex "A" and Annex "B" of this report list the vein reserves in detail.

Ore Reserves

	Tons Ore Plus Waste	Average Troy Ozs. per Ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
ASSURED					
January 1, 1953	176,119	23.45	.1861	4,130,665	32,777
ASSURED & PROBABLE					
January 1, 1952	342,809	20.08	.1631	6,882,113	55,923
Decrease	166,690			2,751,448	23,146
Increase		2.37	.0230		

Ore Reserve Summary of All Classes
January 1, 1953

	Tons of Ore Plus Waste	Average Troy Ozs. per Ton		Total Troy Ozs.	
		Ag.	Au.	Ag.	Au.
	$8.75 and up				
Assured	135,707	24.21	.1957	3,285,585	26,563
Possible	40,009	10.03	.0900	401,459	3,600
Total Assured & Possible	175,716	20.98	.1717	3,687,044	30,163
Assured Ore	135,707	24.21	.1957	3,285,585	26,563
Broken Ore	40,412	20.91	.1538	845,080	6,214
Total Assured Ore	176,119	23.45	.1861	4,130,665	32,777
Grand Total Assured, Broken and Possible	216,128	20.97	.1683	4,532,124	36,377

It will be noted from the above summary of Assured reserves with a value above $8.75 that a loss was incurred for the year's operation from the Assured and Probable reserves of 1952 of 166,690 tons of ore, 2,751,448 ounces of silver and 23,146 ounces of gold. However, in arriving at this loss consideration must be given to the conservative method of calculating the reserves for 1953 against those of 1952. This year all Probable ore is classified as Possible and under this method a gain is shown in Possible ore of $8.75 per ton or over of 15,979 tons, 130,027 ounces of silver and 1,052 ounces of gold. Taking the two classifications under consideration, the overall loss from the reserves for 1953 is: 150,711 tons of ore, 2,621,421 ounces of silver and 22,094 ounces of gold.

In calculating the reserves this year, it was discovered that an error had existed in the calculated reserves of the Santa Fe-2 vein since the early 1930's. This had not been found previously as the blocks that contained the error had remained intact until stoping operations started in 1952. This loss amounts to 1,153 tons of ore, 543,228 ounces of silver and 5,886 ounces of gold. Deducting the calculated loss of the Santa Fe-2 vein from the overall loss, the net loss from reserves for the year is 149,558 tons of ore, 2,078,193 ounces of silver and 16,208 ounces of gold.

Work on the Long Range Exploration Program, Development work and Diamond Drilling was pursued intensively during 1952. However, only one vein of importance was discovered, the South San Miguel Branch-1. The failure to find other new veins should be noted.

Exploration and Development

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet	Diamond Drilling
1952	9,732	5,980	3,793	19,505	3,352
1951	9,957	7,955	4,429	22,341	4,040
Decrease	225	1,975	636	2,836	688

The Long Range Exploration Program, inaugurated early in 1950, was continued through the year, but at a somewhat slower rate, due principally to lack of workmen. In some cases it was found advisable to make substitutions for the original proposals, but the end result was the same.

The results of this Program through December, 1952, are as follows:

Long Range Exploration Program

Item	Location	Feet Advance 1952	Feet Advance to Date	Feet in Ore 1952	Feet in Ore to Date	Assay Value 1952	Assay Value to Date	Remarks
#1	L-650, XC-42	0	1,395	0	0	0	0	Completed
#2	L-1150, XC-2-7-8-9	63	2,133	0	0	0	0	Completed
#3	L-300, XC-156	0	570	0	0	0	0	Completed
#4	L-400, XC-156	574	574	0	0	0	0	
#5	L-200, XC-94	210	1,855	175	425	10 .14	11 .12	Completed
#6	L-400, XC-146	0	457	0	60	0	19 .07	Completed
#7	L-650, Esp. XC	0	623	0	0	0		Completed
#8	L-650, Dr-40	0	190	0	0	0	0	
#10	U-150, XC-62	0	798	0	80	0	12 .04	Completed
#11	L-200, XC-95	0	642	0	60	0	14 .11	Completed
#12	"O" XC-69	0	540	0	0	0	0	Completed
#13	L-300, Dr-6	0	719	0	110	0	22 .07	Completed
#14	U-350, Dr-47	191	198	30	30	23 .20	23 .20	Completed
#15	U-450, XC-29	660	695	0	0	0	0	Completed
#16	L-300, XC-40	243	243	0	0	0	0	
#17	L-300, Dr-180	29	29	0	0	0	0	Completed
#18	L-300, D-181	195	195	0	0	0	0	Completed
#21	U-350, XC-D-54	0	757	0	50	0	9 .20	Completed
#24	L-300, XC-178, Dr-179	690	690	150	150	19 .12	19 .12	
#26	L-650, XC-51	213	2,688	0	0	0	0	Completed
#27	W-XC-Winze	0	49	0	0	0	0	Completed
#28	U-150, XC-75	218	218	0	0	0	0	
#29	U-150, XC-50	240	240	0	0	0	0	
#32	L-500, XC-86	221	229	0	0	0	0	
#33	"O" XC-74	0	572	0	0	0	0	Completed
#36	U-150, XC-76	68	68	0	0	0	0	
	TOTAL	3,815	17,367	355	965	15 .14	14 .11	

Diamond Drilling

	1952	To Date
Geologist Recommendation No. 25, Hole No. 42	0 feet	915 feet
Item No. 13 — Hole No. 46	0 feet	352 feet
Item No. 16 — Hole No. 60	100 feet	100 feet
Item No. 26 — Hole No. 48	0 feet	565 feet
Item No. 26 — Hole No. 53	0 feet	320 feet
Item No. 26 — Hole No. 59	115 feet	115 feet
Item No. 26 — Hole No. 64	500 feet	500 feet
TOTAL	715 feet	2,867 feet

Item No. 2, Lower 1150, Rosario, Crosscut No. 2

After 47 feet had been driven on Lower 1150, Crosscut No. 7, and 16 feet on Crosscut No. 8, this work was suspended due to labor shortage and is now considered complete.

Item No. 4, Lower 400, Colonia, Crosscut No. 156

This crosscut was driven 574 feet and cut its objective, the Lower 400, Nueva, Branch 1. Very low spotty values were encountered.

Item No. 5, Lower 200, Nueva, Crosscut No. 94

Drift No. 104, started last year, was continued an additional 733 feet. As it continued in ore, it was decided to consider the balance of this work as development. Four hundred and ninety lineal feet of ore was developed during the year which averaged 8 ounces silver and .13 ounces gold per ton.

Item No. 14, Upper 350, Termópilas, Drift No. 47

Drift No. 47 was driven a total of 191 feet of which 30 feet was in ore averaging 23 ounces silver and .20 ounces gold per ton. The ore found by this work has been mined out and no further work is planned.

Item No. 15, Upper 450, Jucuara-1, Crosscut No. 29

This crosscut was driven 660 feet and although it cut two minor stringers, subsequent development failed to expose any ore. This item has been completed.

Item No. 16, Lower 300, Santa Fe-1, Crosscut No. 40

Diamond Drill Hole No. 60 was driven to determine what type rock exists West of San Blas-1 and Independencia-1 and to see if it would be favorable for mineral depositions. This hole was started from the face of Lower 300, Santa Fe-1, Crosscut No. 40, at coordinates N-3765, W-3332 and driven 100 feet due North. It started in Tuff and bottomed in Dacite which is considered favorable host rock. In view of these results, Crosscut No. 40 will be continued.

Item No. 17, Lower 300, Capitana-2, Drift No. 180

This drift, after being driven 29 feet, cut the projection of the Crisanta-3 vein without exposing any ore of commercial grade. No additional work is contemplated on this item.

Item No. 18, Lower 300, Southwest, Drift No. 181

One hundred and ninety-five feet were driven on the Southwest-1 vein in the segment North of Jucuara-3. No values were exposed and the work was stopped.

Item No. 24, Lower 300, Buena Ventura, Crosscut No. 178

This crosscut was driven 282 feet and exposed the vein that has been named the South San Miguel Branch-1, the only discovery of any importance made during 1952.

Four hundred and eighty-six lineal feet have been driven on this vein on the Lower 200 level to date, 578 feet on the Lower 300, 407 feet on the Lower 400 and 30 feet on the Lower 500 level. This vein has added 8,572 tons of 35 ounce silver and .25 ounce gold ore to the Assured Reserves in addition to the development and stoping ore mined during 1952.

Development of this vein continues, but the prospect of finding any large quantities of ore in the future is considered unlikely.

Item No. 26, Lower 650, Crucero, Crosscut No. 51

This crosscut was driven 213 feet during 1952 without exposing anything of interest.

Diamond Drill Holes Nos. 59 and 64 were driven from this crosscut 115 feet and 500 feet respectively toward the Lower 300, San Joaquín, Crosscut No. 78. They were in Dacite for their entire lengths, but did not expose any veins nor values. The work on this item has now been discontinued and the material (pipe and rails) has been salvaged.

Item No. 28, Upper 150, Peña Blanca, Crosscut No. 75

This has been driven 218 feet to date and no indications of any vein have been noted. However, approximately 700 feet remain to be driven before this reaches its proposed objective.

Item No. 29, Upper 150, Independencia, Crosscut No. 50

Two hundred and forty feet have been driven to date, but this crosscut will not reach its objective, that is, to cut the stringers found on Lower 200 San Blas and Lower 300 Independencia, until some time during 1953.

Item No. 32, Lower 500, Santa Fe-4, Crosscut No. 86

This crosscut was driven 221 feet and exposed the vein now known as Santa Fe-8. It was decided to stop the crosscut while this vein was being developed. Subsequent development of this vein added 994 tons of 16 ounce silver and .22 ounce gold ore to Assured Reserves. The crosscut will be continued to the dacite-sediment contact.

Item No. 36, Upper 150, Salvador, Crosscut No. 76

This crosscut was started late in the year and only 68 feet of advance has been made without any results. Its purpose is to see if the Salvador vein continues beyond the Southwest Fault and therefore will be continued during 1953.

Exploration and Development

A total of 19,505 feet of advance was made during the year, of which 3,815 feet was on the Long Range Exploration Program. Seven thousand two hundred and fifteen feet was new development and the balance of 8,475 feet represents the work done on raises and sub-levels in connection with stope preparations.

Of the total of 11,030 feet of advance on the Exploration and Development Program, 1,740 feet were in ore averaging 22 ounces silver and .17 ounces gold per ton. Excepting the South San Miguel, Branch-1 mentioned earlier in this report, subsequent investigation revealed that the ore exposed did not have any great vertical extension.

Diamond Drilling

Diamond Drill Hole No. 55

Hole No. 55, started in 1951, was driven 100 feet, S-50°W from the Upper 150 Crucero Crosscut at coordinates N-1550, W-1765 to verify the result obtained from a sludge sample taken from Diamond Drill Hole No. 54, mentioned in last year's report.

This hole showed no signs of a vein nor values, so it must be assumed that the values shown in the sludge sample from Hole No. 54 were in error. No further work is planned in this area.

Diamond Drill Holes No. 56 and No. 57

Hole No. 56 started in 1951 was driven 100 feet due North from the Lower 400 Calcite Fault, Block No. 86 at coordinates S-4561, W-2757 to find out if the stringer found in the footwall of the fault in Block No. 88, which carried good but spotty values, continued to the East. At collar plus 35 feet to 40 feet a sludge sample showed 16 ounces of silver and .06 ounces of gold. This was later developed by Crosscut No. 161 and Drift No. 162 with disappointing results.

Hole No. 57 was driven S-10°W from the same location as Hole No. 56 to prospect the area south of the Calcite Fault. After being driven 185 feet, the hole was abandoned without having exposed values.

Diamond Drill Hole No. 58

This hole was driven in an effort to prospect the Santa Fe Main Vein on the horizon of the Lower 1050 level. This was started on the Lower 650 Salvador, Drift No. 25 at coordinates S-3298, W-1709, and driven S-15W at an angle of —57° to the horizontal. Below collar plus 125 feet the ground was so badly broken that no core nor sludge was

recovered. The hole was abandoned at 268 feet without reaching its objective or exposing any vein.

Diamond Drill Hole No. 61

This was started from Lower 400, Esperanza Crosscut at coordinates S-5985, W-2883, and driven S-70°E at —60° for a distance of 311 feet to determine rock type. Highly altered and broken Dacite was encountered for the full depth of the hole, but without any signs of vein material.

Diamond Drill Holes No. 62 and No. 63

These holes were driven from the Lower 1150, Crosscut No. 9, to prospect the Rosario vein below this level.

Hole No. 62 was driven 192 feet and showed iron stained quartz at 127 feet, but with no sulphide mineralization nor values.

Hole No. 63 was driven 150 feet to cut the vein 110 feet west of Hole No. 62, and showed a quartz vein at 92 feet but contained no values.

Diamond Drill Hole No. 65

This hole was driven to prospect the Jucuara No. 2 vein below the Lower 850 level in Block No. 91. It was started on the Lower 850 level at coordinates N-1528, E-3942 and driven 315 feet S-35°E at —65° to the horizontal. At collar plus 115 feet a 5 inch quartz vein was cut that assayed 27 ounces silver and .14 ounces gold per ton, which did not warrant sinking No. 6 shaft to that level.

Diamond Drill Hole No. 66

Hole No. 66 was driven 236 feet due South at —48° from Crosscut No. 7 at coordinates N-4580, E-2500 in an effort to determine whether the Lower 750 San Cristobal had exposed all of this ore body or only the uppermost part of it. Hole No. 66 should have cut the projection of the vein at 118 feet, but it did not do so. At collar plus 214 feet this hole cut a 1 inch quartz stringer with no values. The hole was continued another 22 feet in the hope that the dip of the vein had changed, but such was not the case and the hole was discontinued.

Diamond Drill Hole No. 67

This hole is a continuation of Hole No. 52 started last year, which was stopped in order to expose, by Crosscut No. 7, the values that had been obtained from a sludge sample. Hole No. 67 was driven from this crosscut 519 feet S-8°W horizontally. At collar plus 450 feet a sludge sample assayed 28 ounces silver and .07 ounces of gold over a 5 foot width. Crosscut No. 7 will be continued so as to prove or disprove the results of the sludge assays.

Diamond Drill Hole No. 68

This hole was started from the face of Lower 500, Santa Fe-4, Crosscut No. 86 at coordinates N-4459, E-3285 and driven 96 feet S20°W horizontally. Between collar plus 4 feet and collar plus 30 feet several sludge samples showed some values in both silver and gold, but subsequent driving of Crosscut No. 86 proved that the values were very low and that Hole No. 68 had followed nothing more than a 2 inch stringer.

Diamond Drill Hole No. 69

At Zero Jucuara No. 4, Drift No. 6 this hole was started at coordinates N-1800, E-3200, and driven 230 feet S-54°W horizontally in search of an extension of Jucuara No. 7 or any other vein that might exist in this area. Nothing of any value was found

Diamond Drill Hole No. 70

At Lower 300, Jucuara No. 1, coordinates N-2369, E-1948 this hole was started and driven N20°E horizontally for 135 feet. Between collar and collar plus 20 feet the sludge assayed 184 ounces silver and .84 ounces gold per ton. Subsequent exposure by Crosscut No. 184 revealed that the hole had followed a narrow, highgrade stringer and that there was nothing here of any economic value.

Vein Development and Stoping

A total of 186,845 tons of ore was delivered to the mill during 1952; of this, 3,431 tons or 1.8% came from old fills, 14,256 tons or 7.6% from development, and 32,597 tons or 17.5% from ore not on reserve.

It will be noticed that the tons from old fills for 1952 showed a decrease; that is, from 18,287 tons in 1951 to 3,431 tons in 1952. This decrease is accounted for by the depletion of known old fills that have ore of a commercial value. A further decrease for 1953 can be expected.

The amount of ore from development in 1952 remained almost the same as that of 1951. The Jucuara-1, Porvenir, Nueva Branch-1, South San Miguel Branch-1, Santa Fe-4, and Salvador veins produced the greater part of development ore for 1952.

The following veins supplied 58% of the ore delivered to the mill: Colonia-1, Culebra-2, Jucuara-1, Jucuara-2, Rosario Stringer, Salvador, Santa Fe-2, Santa Fe-4, and South San Miguel Branch-1.

The number of veins worked during the year was 56.

Salvador Group

Salvador Veins

The Salvador vein and Branch-11 vein metioned in last year's report produced a total of 9,958 tons of ore for the year. At the beginning of 1953, there are no blocked out reserves on the Salvador main vein, and this year will see the end of the largest producer in the history of the company. There is a small reserve left on Branch-11 vein.

Jucuara-1 (Fortuna)

The Jucuara-1 vein, together with its branch veins, was the largest producer for the year, 28,385 tons being extracted. There remains a blocked out reserve of 15,710 tons of ore assaying 27 ounces of silver and .05 ounces of gold per ton.

The Jucuara-1, Branch-13, and Branch-14 were good producers during 1952, supplying some of the better grade ore that was used to boost the mill heads.

Jucuara Group

Jucuara-2

The stoping operations on this vein were stepped up during the year, and a total of 8,986 tons of ore was extracted. At the end of the year it was completely depleted.

Santa Fe Group

Santa Fe-2

This vein was mined on a larger scale during 1952 than in former years, 6,979 tons of ore being extracted. At the end of 1952 there was a broken reserve of 4,668 tons of ore, averaging 31 ounces of silver and .33 ounces of gold per ton.

Santa Fe-4

The Santa Fe-4 was the second largest producer for the year being surpassed only by the Jucuara-1 vein and branches. A total of 23,197 tons of ore was delivered to the mill during 1952, leaving a broken tonnage of 9,011 tons of 21 ounce silver and .25 ounce gold per ton. A reserve of 48,053 tons, containing 1,011,630 ounces of silver and 11,516 ounces of gold, remains on Assured, and 21,670 tons, containing 186,115 ounces of silver and 1,984 ounces of gold, on Possible at the beginning of 1953.

Old Mine Group

South San Miguel Branch-1

The South San Miguel Branch-1 vein was the only new find of importance during the year.

This vein was cut by Crosscut No. 178, Lower 300, Item

No. 24 of the Long Range Exploration Program. The level on which it was cut proved to be the best as far as both grade and lateral extent were concerned, as it permitted approximately 500 feet of lateral development in ore. On the Lower 200, 180 feet are in ore; 125 feet on the Lower 400, no development in ore on the Lower 500. Stoping raises will be driven to the Lower 400 level for extraction purposes. At the end of 1952, Raise No. 29 from the Lower 200 to the Zero level was up 67 feet and in ore below commercial grade. The ore above the Zero level was mined out many years ago.

The ore made available by this find consisted of the following: ore from stoping, 3,336 tons; from development, 4,253 tons; broken ore at the end of the year, 1,383 tons; Assured Reserves, 8,572 tons; or a total of 17,544. The 8,572 tons of Assured ore has an assay value of 35 ounces of silver and .25 ounce of gold per ton. It is expected that this vein will produce in excess of 20,000 tons of ore, containing more than 500,000 ounces of silver and 4,000 ounces of gold.

Other Veins

The following veins were depleted during the year, leaving no Assured or Possible ore on reserve. Any additional ore that comes from these veins will be small amounts, not sufficient to be carried on reserves or as broken ore remaining at the end of the year: Fortuna North, Jucuara-2, San Benito-1, Northwest-2, Northwest-4, Rosario-1, Santa Fe-1, Santa Fe-7, Candelaria Main, Candelaria Branch-2, Crisanta-1, Culebra Stringer, Guadalupe, San Miguel South, West Veta-4 North.

Old Fills

The grade from old fills during the year averaged 8.5 ounces of silver and .063 ounces of gold per ton. Very little ore can be expected from old fills during 1953 as this source of commercial grade ore is practically exhausted.

The major source of ore from old fills follows in detail:

Candelaria	874 tons
Northwest	655 tons
Rosario	762 tons
Salvador	855 tons
	3,146 tons

Numerous other veins supplied 285 tons, giving a total of 3,431 tons from old fills.

General Mine Comments

The labor supply for the first seven months of 1952 was below average, causing a severe reduction of tons mined and milled for this period. However, the mine was able to build

up its broken ore reserves the last five months of the year when the labor supply increased. The development and exploration work suffered greatly, and it was impossible to overcome this loss during the last few months of the year. The loss in tons of ore delivered to the mill during the first seven months of 1952 could not be overcome. As a result of this, 186,859 tons were delivered to the mill in 1952 as compared with 194,080 tons in 1951.

Mill

The Rosario Mill had a satisfactory operation for 1952 with only a minimum amount of repairs being necessary. The silver recovery for the year showed an increase over that of 1951 as follows: 1952, 91.485%; 1951, 90.611%. The gold recovery for 1952 was 93.7231% or an increase of .0797% over that of 1951.

The concentrate roaster mentioned in last year's report was put into operation on July 2, 1952 and operated a total of 128 days or 70.32% of the time. The total sulphur burned and sent to the cyanide recovery plant as SO_2 was 70,142 pounds, equivalent to $3,124.85 of imported sulphur. The increased recovery resulting from roasting the concentrate was 6,719.33 ounces silver and 8.83 ounces of gold. The total benefits derived from the roaster amounted to approximately $9,000.00 for 128 days.

It is not anticipated that any new milling equipment will be needed for 1953.

EL MOCHITO (HONDURAS)

Ore Reserves

Below you will find a summary of the ore reserves for El Mochito based on silver at $0.75 per ounce and gold at $35.00 per ounce and lead at the current price of $0.13½ per pound.

Comparative Summary — Assured Ore

	Tons of Ore Plus Waste	Average Troy Ounces per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.	Pounds Lead	Pounds Zinc
Assured January 1, 1953	161,657	30.38	.0180	4,910,773	2,962	4,779,900	2,071,640
Assured & Probable January 1, 1952	191,276	30.59	.0190	5,850,914	3,620	4,729,340	1,685,426
Increase						50,560	386,214
Decrease	29,619	0.21	.0010	940,141	658		

Comparative Summary — Possible Ore

	Tons of Ore Plus Waste	Average Troy Ounces per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.	Pounds Lead	Pounds Zinc
Possible							
January 1, 1953	49,324	20.54	.0170	1,013,093	863	1,458,420	632,080
January 1, 1952	21,070	16.09	.0120	338,984	244	520,960	185,657
Increase	28,254	4.45	.0050	674,109	619	937,460	446,423

Ore Reserve — Summary of All Classes

Assured	161,657	30.38	.0180	4,910,773	2,962	4,779,900	2,071,640
Possible	49,324	20.54	.0170	1,013,093	863	1,458,420	632,080
Grand Total Assured—Possible — 1953....	210,981	28.08	.018	5,923,866	3,825	6,238,320	2,703,720
Assured, Probable & Possible — 1952	212,346	29.15	.018	6,189,898	3,864	5,250,300	2,051,083
Decrease	1,365	1.07	——	266,032	39		
Increase						988,020	652,720

As in the case of the Rosario Mine, the method of classifying the ore reserves for 1953 has been changed from the method used in 1952, and is now uniform at both properties.

The large decrease shown under Assured Ore for 1953 is accounted for mainly by re-evaluating certain blocks which were included under Assured and Probable for 1952 and which are now shown under Possible.

It is deemed advisable to include these blocks under Possible (even though their silver-lead content is high enough to be carried as Assured) because of the metallurgical difficulties which are being experienced at times due to the high manganese content of the ore. Also, many of the blocks are associated with cavern fills, and it is never known beforehand where the ore will terminate when running into these cavern fills.

General

During the year there were several serious and costly set-backs which, together with other conditions, greatly increased the costs and reduced the profits earned by this property. The new turbine pump ordered for delivery in May did not arrive until late in the rainy season when the Lower 650 level had already been flooded on September 5th by a 3" cloud burst. During the process of temporarily abandoning the Lower 650 level and raising the pumps, the electrical foreman was drowned. Shortly thereafter, while lowering the new pump, a hoist failure caused the pump and column to drop to the bottom of the shaft when it was within 70 feet

of being in place. The Lower 525 level which was also flooded was not recovered until the middle of November, and the Lower 650 level was not recovered until late in December. Two other fatal accidents with attendant indemnity payments, rising cost of materials, and lower metallurgical recovery describe the unfavorable background of operations for 1952.

On the brighter side of the picture, it can be reported that the Reserves for 1953 are almost equal to those of 1952. Only 18% of the ore milled for 1952 came from the main ore body, 33% from reserves outside of the main ore body, 31% from ore not on reserve and 18% from development.

At the start of the year, the future seems reasonably good for maintaining the reserves for 1953 as there remains ore not fully developed on the Zero, Lower 400, Lower 525 and Lower 650 levels and good prospects of finding still more ore on these levels.

Mine Production

While as little ore as possible was taken from the main ore body, it was found necessary to start a stope on the higher grade ore above the Lower 275 level to maintain the desired grade of ore going to the mill. However, the total tonnage removed from the main ore body was only 7,502 tons. The same ratio will be maintained during 1953 with regard to the main ore body, unless it is found desirable to mine at an increased rate the lower grade ore on the Lower 525 and Lower 650 levels, which has a higher lead content than found in the rest of the mine.

The same mining procedure as used in the past will be followed during 1953; that is, all small pipes of ore which are too small to be considered under Assured or Possible blocks will be mined as Development Stopes. In this manner, the Assured ore will be conserved as much as possible for future stoping operations.

Development and Exploration

FOOTAGE DRIVEN:

Year	Drifts or Crosscuts	Raises, Shafts & Winzes	Total Feet	Diamond Drilling
1952	11,143	2,476	13,619	6,023
1951	11,943	2,366	14,309	4,202
Increase		110		1,821
Decrease	800		690	

The above includes work at Caliche which is as follows:

1952	1,048	64	1,112
1951	1,709	89	1,798
Decrease	661	25	686

The development program was slowed down during the last half of the year due to labor shortages and heavy rains, resulting in the total feet driven being below that of 1951. A breakdown on the advances by levels follows:

Upper 300 Level — Drifts 342 feet, Crosscuts 353 feet.

This was a new level which was started to connect with the winze which is known as Prospect No. 21. The connection was made and the structure was followed both to the east and west. The values in the winze decreased just before reaching the Upper 300 level and no commercial ore of any extent has been found. Further development will be continued.

Upper 50 Level — Drifts 46 feet.

The only work done on this level was in Drift 6-S. The structure carries a heavy mud fill and requires much timbering, Inasmuch as the same structure is being developed on the Lower 150, this work has been stopped, pending results found there.

Zero Level — Drifts 392 feet, Crosscuts 2,352 feet, Raises 178 feet.

Late in 1951 it was decided to extend Adit No. 3 under Prospect No. 21 and, after reaching this objective, turn the crosscut towards Prospect No. 22, if results warranted this. The crosscut has been turned in that direction, but only with the intention of crosscutting the entire Prospect No. 21 area until such time as an orebody is found at Prospect No. 22.

Several indications of ore were cut in Crosscut No. 3. Some of these seem to tie in with the ore on the lower level (Lower 150), but to date this has not been proved in all instances. However, Raise No. 22 from the Lower 150 and Raise No. 36 from the Lower 275 did connect, thereby proving the continuance of this ore to the Zero level. This permitted the addition of 7,856 tons of ore, containing 288,216 ounces of silver and 372 ounces of gold to the Assured Reserves.

The remaining work done on this level consisted in following up any small indications of ore.

Lower 150 Level — Drifts 1,877 feet, Crosscuts 535 feet, Raises 831 feet.

Important work on this level can be divided into three major areas: Crosscut No. 14, with Drift No. 28 laterally off this; Drift No. 16 going out under the areas of Prospects Nos. 14 and 15; and Drifts Nos. 33 and 34. Raises and sublevels were also driven to help solve mining and development problems. Drift No. 33, with Raise No. 22 going through to the Zero level, was the most productive of all the development on this level and shows the most promise at this date for future ore.

Lower 275 Level — Drifts 514 feet, Crosscuts 695 feet, Raises 313 feet.

Practically all of the work done on this level during 1952 was done in an effort to locate the projections of ore found on other levels, either above or below.

Lower 400 Level — Drifts 700 feet, Crosscuts 474 feet, Raises 339 feet.

With the exception of extending a few old crosscuts and raises to get into inaccessible areas, all work on this level has been concentrated in the area around Drifts Nos. 27, 28 and 29. Raise No. 30 was driven with various sub-levels at the western end of Drift No. 29 and a stope with above average values was started there. Drift No. 29 developed ore throughout its entire length; however, all of the ore in this drift, with the exception of that in the Raise No. 30 area, is extremely refractory.

Crosscut No. 26 is being extended to cut the projection of the ore from Crosscut No. 13 on the Lower 525 level.

Lower 525 Level — Drifts 10 feet, Crosscuts 603 feet, Raises 479 feet.

The major part of the development work on this level was done on Crosscut No. 13. This crosscut was turned to drive out under Raise No. 30 on the Lower 400 level. Soon after turning, it went through an ore body similar in appearance to the one found in Crosscut No. 11, Lower 650. Lateral crosscuts as well as raises were driven through the ore, but the apparent limits of this do not indicate a large or regular orebody. Another pipe of ore has been located just south of the above mentioned ore and better success is being had in following its vertical extension. This has not been sufficiently developed at the end of the year to include as ore reserves. This area will require considerable diamond drilling in order to outline the orebody.

The remaining work done on this level consisted of driving an ore pass to the Lower 400, raises, and sub-levels in connection with stoping operations.

Lower 650 Level — Crosscuts 871 feet, Raises 202 feet.

Crosscut No. 10 was continued for the purpose of getting under the ore of Stope No. 9, Lower 525. This crosscut only cut a small spot of ore. Diamond drilling, however, indicated that there was ore above and to the south of Crosscut No. 10, and as a result of this, Crosscut No. 11 was driven. A good sized orebody was located by this crosscut, higher than average in lead and zinc content, but marginal in silver. Raises were driven vertically but soon went into waste which indicates that if the ore continues up, it leans to one side or the other. It seems highly possible that the ore found on the

Lower 525 level is a continuation of this same ore. This possibility will be explored by diamond drilling in 1953.

Caliche

Drifts 499 feet, Crosscuts 549 feet, Raises 10 feet, Winzes 10 feet.

Following the program outlined in 1951, the main crosscut was driven out towards the Adit No. 5 area, trying to cut the fault which the geological staff believed to be there. The crosscut was driven beyond the target zone without crossing a contact between the limestone and redbeds. A badly shattered zone was encountered, containing a great deal of calcite. This zone was so heavy and loose that it was not practical to drive through it. Therefore, an attempt was made to go around it. This, also, was unsuccessful and, after driving beyond Adit No. 5, the crosscut was stopped. Other work consisted in driving on the most promising leads in the hope of finding an orebody. One drift continued on a barren structure until it ran into a large open water course.

Work was stopped at Caliche in July, when the labor situation became so acute that production at El Mochito could not be maintained without these men.

All ore produced at Caliche during 1952 came from the sub-level which has previously been referred to as a filled water course. Its course is tortuous and winding and the ore has diminished in both grade and quantity.

Heavy rains and floods during September carried away the bridges and damaged severely the roads that lead to Caliche. To date it has been impossible to repair them due to the continued shortage of labor. It is hoped to get these repair jobs completed during the first half of 1953 so that work can be resumed.

Prospects

During the first few months of 1952, a geological party was engaged to make a report on the major geological features of El Mochito area. A grid was laid out over the main mine and extending over Prospect No. 21 with a separate grid being laid out over Prospect No. 22. Geophysical tests comprising magnetic, self-potential and resistivity methods were used. The magnetometer responded readily over the known orebody and high magnetic zones were found in both of the above named prospects. Later development work underground has proved mineralization containing iron in Prospect No. 21 in the area indicated by the magnetometer. Silver values, however, were low and spotty. Work at Prospect No. 22 has not progressed far enough as yet to prove or disprove the magnetic findings in this area.

Some work was also done on soil analysis with promising results. It is the intention to continue prospecting, using both

the magnetic and soil analysis methods to indicate the most favorable areas. A magnetometer has been purchased to further this work.

Diamond Drilling

A total of 6,023 feet of diamond drilling was done during the year as compared to 4,202 feet for 1951. The results of this work were quite satisfactory.

Mill

The year 1952 was one of general expansion for the mill in the hope of improving the recovery and making further saving wherever possible. Early in the year, a more complex ore was encountered than in previous years. As a result, the mill recovery dropped as low as 72.93% with an average for the year of 79.97%.

The lower metallurgical recovery is a serious and costly problem. The average recovery dropped 4.07% as compared to 1951, or a loss of roughly 50,000 ounces in gross production. In an attempt to overcome this, an extensive construction program, involving the installation of considerable expensive equipment, was instituted. Most of this has not yet been completed. The items which have been installed are: two Deister Tables and the oxide flotation plants. Although this equipment has greatly improved the recovery before cyanidation, it still has not solved the problem arising from the increased refractiveness of the ore. The washing plant and Oliver filter, yet to be installed, are designed to reduce the cost of treatment, leaving the metallurgical difficulties still to be solved. Test work on El Mochito ore in the United States did not indicate that any improvement could be made on the present milling procedure. However, it is hoped that further improvement can be accomplished by the Rosario Metallurgical Department.

Operations in general were comparable to the preceding year. Cyanide and flotation reagent consumption was higher due to more cyanicides in the ore and the use of an additional flotation circuit. Zinc consumption dropped sharply due to using the emulsifier and resulted in a marked saving.

The reduction works results for 1952 are as follows:

Bullion, Concentrate and Sorted Ore Production

	Ounces		Tons	
	Ag.	Au.	Pb.	Zn.
Sorted Ore	15,008.90	2.071	71.2459	6.2630
Jig & Table Concentrates	184,499.12	129.077	367.5826	31.7473
Flotation Concentrates	372,705.68	241.183	252.1805	236.8631
Bullion	427,872.60	471.472		
Totals	1,000,086.30	843.803	691.0090	274.8734

Tons Milled Including Sorted, Previous to January 1, 1953

Total including Stoping & Development Previous to December 31, 1951	Total including Stoping & Dev. for year 1952	Grand Total including Stoping & Development to January 1, 1953
141,851	42,040	183,891

Total Production to Date — Silver & Gold

Net Troy Ounces Previous to Dec. 31, 1951		Net Troy Ounces for year 1952		Total Net Troy Ozs. to Jan. 1, 1953	
Ag.	Au.	Ag.	Au.	Ag.	Au.
4,140,925.18	2,420.509	1,000,086.30	843.803	5,141,011.48	3,264.312

Total Production to Date — Lead

Net Tons Previous to Dec. 31, 1951	Net Tons for year — 1952	Total Net Tons to Jan. 1, 1953
1,575.7553	691.0090	2,266.7643

Construction and Repairs

New construction for the year consisted of a house for the warehouseman, additions to the laboratory, bodega, engineering office, electric shop, mill building, hangar for the airplane and two new rooms at the club. The additions to the mill went for the purpose of installing the concentrating tables, new flotation machines and conditioner tanks and to enlarge the steam drying floor for concentrates.

The following was started, but not completed: An addition to the mine office to serve as a bodega, re-inforcing the mill building to take the big Oliver filter and a new family house.

Expansion

MORAMULCA

Departamento de Choluteca

This property was redenounced and exploration started early in 1952.

A temporary access road was repaired and quarters erected for development purposes only. Three portable compressors and equipment were installed to push the development as rapidly as possible.

The old levels, now designated as 1100 and 1350 levels, were rehabilitated and development started from the old faces.

Development Summary

	Drifts	Crosscuts	Raises	D.D. Holes
1350 Level	680 Feet 157 Feet (old)	327 Feet	0	
1225 Level	205 Feet	0	0	
1100 Level	1,161 Feet 185 Feet (old)	778 Feet	282 Feet	786 Feet
900 Level		105 Feet		
TOTAL	2,046 Feet (new) 342 Feet (old)	1,210 Feet	282 Feet	786 Feet

Esperanza Vein

1100 Level: At 645 feet from the portal, ore was encountered and continued for 526 feet, averaging 5.8 ounces silver and .23 ounces gold per ton over an average width of 6.4 feet.

Raises indicate that the ore will reach the 1225 level or 125 feet above the 1100 foot level. One diamond drill hole, to cut the ore body 200 feet vertically below the 1100 level, failed to show ore in a strong vein at that depth. In the meantime, a 1,500 foot crosscut is being driven to cut this vein on the 900 foot level or 200 feet vertically below the 1100 level.

1225 Level: No ore has been exposed on this level to date.

1350 Level: A short stretch of ore has been exposed on this level, vertically above Block No. 5, 1100 level. However, the area between these levels is only blocked out 40 feet below and 40 feet above as it has not been sufficiently developed. A raise will be driven in 1953 from the 1100 level to the 1350 level to further prove this area.

Santa Rita Vein

1350 Level: Ninety feet of ore averaging 12.5 ounces silver and .13 ounces gold per ton were developed over an average width of 4.5 feet. A crosscut to this vein from the 1100 level, Esperanza, is expected to cut this orebody early in 1953 approximately 260 feet below that developed on the 1350 level. As no vertical development has yet been done on this vein, no tonnage could be placed on Assured Reserve.

Ore Reserve Summary

	Tons Ore Plus Waste $8.75 & Up	Average Troy Ozs. per Ton Ag.	Au.	Total Troy Ounces Ag.	Au.
Esperanza Vein					
Assured	18,400	5.8	.23	106,000	4,320
Probable	21,340	4.2	.22	89,830	4,562
Santa Rita Vein					
Probable	1,870	12.5	.13	23,400	240
TOTAL ASSURED & PROBABLE	41,610	5.3	.22	219,230	9,122

An estimated 41,610 tons of ore averaging 5.27 ounces silver and .219 ounces gold per ton or $11.62, figuring silver at $0.75 and gold at $35.00 has been practically assured. Until the 900 level crosscut reaches the Esperanza Vein, late in 1953, no estimate can be made of depth possibilities although 40 feet of ore on the Esperanza vein below the 1100 level have been included in the Probable Ore Reserve.

Continuation of the 1100 Esperanza ore shoot to the 900 level or below would indicate approximately 200,000 tons of ore that may be developed before the end of 1953.

Expenses

A total of $108,717.64 has been spent on this property during the year.

EL TRÁNSITO

Departamento El Valle

The small crew employed on this property during the year was for the purpose of general maintenance and taking of bulk samples for metallurgical tests. The result of the test work showed the values to be marginal and it has been decided to dispose of the property during 1953.

Total expenses for the year amounted to $3,358.80, the major portion of which was for taxes and labor.

SAN BARTOLO

Departamento Francisco Morazán

Work on this property was started early in March, 1952. After cleaning out the lower drift on the San Bartolo vein and the Spear's No. 1 Crosscut, it was decided to continue to drift on the vein toward the old shaft from which rich ore is said to have been produced in or around 1870.

The drift was advanced 352 feet on the vein by hand drilling, the broken rock being removed in wheelbarrows. All samples taken from the drift, as well as from the surface showings and dumps, were barren. It is proposed to advance this drift an additional 250 feet to bring the face directly under the old shaft.

Total expenses for the year were $6,801.62.

QUITA GANA

Departamento Santa Bárbara

Activities at this property were initiated in January, 1952 and continued throughout the year. A camp was established, trails were cleared and levelled off and four adits were started, using hand drills and wheel barrows. A 1,240 foot airfield was also prepared. Hand drilling in the hard limestone proved to be slow and was discontinued in favor of diamond drilling after completion of the landing field when it was possible to fly in diamond drilling equipment.

Actual diamond drilling did not get under way until early in October, a great deal of delay having occurred in getting the equipment to the property and a further delay being occasioned by lack of operating personnel. Advantage was taken of this time to cut side hill contour trails at 100 foot vertical intervals in the areas which appeared favorable for ore deposition.

Numerous mineralized areas were located, but no definite orebodies were developed. By the year's end, several of the possibilities for ore occurrence have been eliminated.

Total expenses for the year amounted to $42,486.00.

LA LABOR

Departamento de Ocotepeque

El Ingenio Mine, near La Labor, Ocotopeque, Honduras was visited in November, 1952 by the Expansion Staff. Shortly thereafter, complete sampling of the old underground workings was undertaken.

The job was not complete at the end of December, but enough returns were in to indicate the desirability of exploratory work to determine the extent of the favorable zones indicated by the sampling. Plans for such exploration are being formulated.

Total expenses for the year amounted to $820.40.

CLAVO RICO

Departamento Choluteca

A preliminary examination of this property was made in December, 1952. Several samples from an open pit assayed more than one ounce gold per ton and were the basis for initiation of underground work to explore the formation at a depth of approximately 100 feet below the surface.

Total expenses for the year amounted to $634.26.

OTHER PROSPECTS (General Prospecting)

Chile Mountain Prospects, Depto. Francisco Morazan, Honduras

Field work was carried out for about a month. This work was discontinued in May due to the shortage of personnel and in favor of more promising prospects.

Agua Caliente, San Francisco de Ojuera, Depto. de Santa Bárbara, Honduras

This antimony prospect was examined in May, 1952 and was turned down because of unattractive grade and tonnage.

Chiquistepe Prospect, Depto. Francisco Morazán, Honduras

The preliminary examination in June proved unfavorable; however, further work on this prospect is anticipated.

Riachuelo Prospect, Depto. Comayagua, Honduras

A preliminary examination was made on this placer ground and proved favorable. However, a formal examination, made by sinking test pits, indicated lack of sufficient tonnage and values for this type of operation and therefore the option was dropped

Total expenses for the year, including other general prospecting, amounted to $23,297.92.

Conclusion

I wish to take this opportunity to express my appreciation to the Company staff at Rosario and El Mochito for their continued contribution to the welfare of the Company and its stockholders, and to acknowledge with thanks the assistance received from the officers of the Company, the Board of Directors and the staff of the New York City office.

Respectfully submitted,

F. H. STEPHENS,
General Manager.

GENERAL MANAGER'S REPORT

EL DORADO (EL SALVADOR)

Ore Reserves

The summaries of assured ore carried as active reserves appear immediately below:

	Tons of Ore Plus Waste	Average Troy Ounces Per Ton		Total Troy Ounces	
		Ag.	Au.	Ag.	Au.
February 10, 1953	32,634	1.51	.366	49,300	11,951
January 1, 1952	32,742	1.07	.31	35,113	10,321
Decrease	108				
Increase		.44	.56	14,187	1,630

The ore reserve calculations were made as of February 10, 1953 instead of January 1, 1953. This was done because of the fact that the decision has been made to terminate operations and development work was practically finished on February 10 and the ore reserves as given above may, within small limits, be considered as final for the property.

There remains only one heading being driven which may add some ore to the reserves. However, it is impossible to determine with any degree of accuracy the tonnage of ore that will be left in the mine at the time of closing due to the fact that areas of operation become so confined as to make further mining uneconomical. At best, therefore, the ore reserve figures should be considered as a guide in estimating the actual life of the mine.

NOTE: Above tonnage for 1953 is calculated on 15 cu. ft. per ton basis.

Exploration and Development

FOOTAGE DRIVEN

Year	Drifts	Crosscuts	Raises & Winzes	Total Feet
1952	4,173	1,522	2,073	7,768
1951	5,367	2,317	2,824	10,508
Decrease	1,194	795	751	2,740

Exploration Crosscuts

175 Level Crosscut No. 21

This Crosscut was driven 173 feet East during the first part of 1952 and cut the Cubías Vein which had been trenched on the surface and opened up by means of the Escuela Adit. The assay results of samples on this vein at this depth did not show ore of commercial quality and confirmed the results

realized on the other horizons. No further work will be done on this Crosscut.

300 Level Crosscut No. 30

This Crosscut was advanced 191 feet East from Drift No. 10 Zancudo and intersected what was apparently the Potrero Vein but it was of no significance and the crosscut was stopped.

425 Level Crosscut No. 41

During 1952 this crosscut was driven 604 feet East and cut the Minita No. 1 and Portillo Veins. As the ground was well consolidated at this horizon it was possible to drill a diamond drill hole 238 feet East from the Portillo Vein which intersected the Moreno Veins but these veins had split up into a series of small stringers without values. As a consequence the main crosscut was not driven farther.

Some other minor crosscuts were driven short distances from various drifts which brought the total footage up to 1522 feet. However, no ore discoveries were made.

Vein Development and Stoping

During the year 61,501 tons of ore were delivered to the mill and 1,081 tons were sent to the surface dump. Of this total tonnage 53,667 tons came from stoping operations while 8,915 tons were produced from development work. At the end of the year there was a broken ore reserve of 9,651 tons in Stopes and mill bins and 2,064 tons on the surface dump.

The following veins were the source of ore produced during the year: Minita-1, Minita-3, Moreno-2, Zancudo and Portillo.

Dorado Vein

There was no ore produced from this vein which was one of the better producers in the earlier stages of operations.

Minita No. 1

This vein produced 17,925 tons during the year of which 16,488 tons came for stoping operations while 1,437 tons came from development. As of the end of the year, all lateral development work on this vein had been permanently discontinued on all levels.

Minita No. 3

There were 12,970 tons from this vein during the year of which 9,113 tons came from stopes and 3,857 tons came from development work.

Moreno No. 2

There was a total of 11,179 tons produced from this vein during 1952. Stoping operations accounted for 10,044 tons and development 1,135. There was no additional ore blocked out on this vein and at the end of the year it had been abandoned on all levels.

Portillo No. 1

This vein produced 340 tons of ore during the year all of which came from development.

There was 337 feet of development work done on this vein on the 425 level but no ore of milling grade was found and this vein has also been permanently abandoned on all levels.

Zancudo No. 1

This vein was again the major producer, the tonnage amounting to 20,168. Of this, stoping accounted for 18,022 tons and development 2,146 tons.

There were 1,594 feet of development driven on this vein on the 425 level and it was established that the ore bottoms above this level which materially reduced the tonnage anticipated.

General

The principal object of our work during the past year was to determine whether or not a change for the better in the previously unsatisfactory conditions could be reasonably expected. By the middle of the year it became evident that the long range prospects for the property were quite discouraging and exploration was curtailed and plans made for mining out the remaining higher grade ore and terminating operations.

Exploration Program for 1953

With the exception of the one heading previously mentioned there will be no further lateral development work done.

Mill

The mill operated during the year at a rate below its capacity as the mine could not supply the required tonnage. The results were as follows:

Dry tons milled	Mill Head		Total contents		Total Production	
	Ag.	Au.	Ag.	Au.	Ag.	Au.
61,560	1.56	.281	95,841	17,317	79,389	15,182

Recovery

Au.	Ag.
87.67%	83.83%

Tonnage Mined Previous to January 1, 1953

Vein	Total including Stoping & Development Previous to December 31, 1951	Total for Year 1952	Grand Total Incl. Stoping & Development Jan. 1, 1953
Cabañas	88	.....	88
Colonia	74	.....	74
Dorado-1	32,866	.....	32,866
Dorado-2	407	.....	407
Dorado-3	349	.....	349
Minita-1	76,672	17,925	94,597
Minita-3	6,613	12,970	19,583
Moreno-1	2,196	.....	2,196
Moreno-2	3,313	11,179	14,492
Portillo-1	7,431	340	7,771
Portillo-2	62	.....	62
Potrero	159	.....	159
Rosario	289	.....	289
Zancudo-1	58,215	20,168	78,383
Zancudo-2	299	.....	299
Veta Grande	25	.....	25
TOTALS	189,058	62,582	251,640

Total Production to Date

Net Troy Ounces Previous to Dec. 31, 1951		Net Troy Ounces for year 1952		Total NetTroy Ounces to 1/1/53	
Ag.	Au.	Ag.	Au.	Ag.	Au.
206,582	43,096	79,389	15,182	285,971	58,278

Summary to Jan. 1, 1953

From Stoping	187,578 Tons
From Development	64,062 Tons
TOTALS	251,640 Tons

I would like to express my deep appreciation of the cooperation of each individual staff member in promoting the best interests of the company under the unsatisfactory and trying conditions that have existed during the past year. The helpful assistance of the Board of Directors, officers of the Company and all departments of the New York office is gratefully acknowledged.

Respectfully submitted,

M. M. MOSER,
General Manager.

ANNEX "A" — ASSURED ORE RESERVES

($8.75 per ton & up at 75c. silver and $35.00 gold)

Estimated Reserves (13 & 14 cu. ft. per ton)	Avg. Vein	Width Waste	Feet Stope	Tons Ore & Waste	Avg. Troy Ozs. per ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Salvador Group								
Jucuara—1 (Fortuna)	2.03	1.70	3.73	15,710	27	.05	426,214	774
Salvador	1.55	1.45	3.00	2,139	22	.03	46,971	74
Jucuara Group								
Jucuara—3	1.65	1.35	3.00	1,784	10	.15	18,530	259
Jucuara—4	1.40	2.10	3.50	8,140	31	.09	252,148	725
Santa Fe Group								
San Benito—2	2.81	1.24	4.05	2,434	13	.10	31,187	252
Santa Fe—2	2.68	2.36	5.04	26,656	32	.30	851,304	7,904
Santa Fe—4	3.17	1.76	4.93	48,053	....	....	1,011,630	11,516
Santa Fe—8	2.86	2.14	5.00	994	16	.22	15,901	216
Old Mine Group								
Capitana—1	0.82	1.18	3.00	2,008	3	.19	5,929	391
Catalina—2	1.28	1.72	3.00	3,046	15	.02	45,630	47
Colonia—1	1.75	1.25	3.00	1,818	22	.53	40,106	965
Culebra—1	1.66	1.34	3.00	1,366	20	.04	27,090	50
Culebra—2	1.62	1.38	3.00	1,496	18	.05	27,448	69
Esperanza	1.19	1.81	3.00	1,079	15	.04	16,247	47
Northwest—3	1.43	1.57	3.00	1,039	17	.09	17,820	94
Nueva	1.28	1.72	3.00	2,358	13	.13	29,554	304
Nueva Branch—1	1.27	1.73	3.00	2,631	11	.20	28,596	532
Porvenir	2.33	1.17	3.50	727	15	.05	11,137	39
South San Miguel Br—1	1.62	1.72	3.34	8,572	35	.25	297,174	2,169
Other Veins								
Veta—4 South	1.57	1.59	3.16	3,657	23	.04	84,969	136
TOTAL				135,707			3,285,585	26,563

Estimate of Broken Ore in Stopes & Ore Passes

Level	Vein	Block	Tons	Grade Ag.	Grade Au.	Total Ozs. Ag.	Au.
L-300	Buena Ventura	47	896	12	.09	10,752	80.64
U-150	Catalina—2	65	405	12	.01	4,860	4.05
U-150	Colonia—1	47	596	13	.04	7,748	23.84
L-100	Colonia—1	42	190	20	.06	3,800	11.40
L-500	Culebra—2	47	309	14	.09	4,326	27.81
Zero	Culebra Stringer	51	644	9	.04	5,796	25.76
U-150	Esperanza	55	410	14	.05	5,740	20.50
Zero	Esperanza	54	195	10	.03	1,950	5.85
L-650	Guadalupe	53	286	14	.10	4,004	28.60
U-250	Jucuara—1	77-A	547	25	.05	13,675	27.35
Zero	Jucuara—1	72	150	20	.04	3,000	6.00
Zero	Jucuara—1	76	1,267	25	.05	31,675	63.35
Zero	Jucuara—1 Br. 13	81	930	20	.03	18,600	27.90
U-250	Jucuara—1 Br. 14	78	2,373	25	.03	59,325	71.19
U-150	Jucuara—1 Br. 14	77	1,814	30	.03	54,420	54.42
Zero	Jucuara—1 Br. 14	77	58	15	.01	870	.58
L-300	Jucuara—4	84-B	102	22	.04	2,244	4.08

ANNEX "A"—*Cont'd.*

Level	Vein	Block	Tons	Grade Ag.	Grade Au.	Total Ozs. Ag.	Au.
L-400	Jucuara—4	84-B	417	20	.07	8,340	29.19
L-400	Northwest—1	48	18	8	.08	144	1.44
L-500	Northwest—1	49	193	7	.08	1,351	15.44
L-200	Northwest—3	48	179	13	.08	2,327	14.32
L-400	Northwest—3	49	313	12	.10	3,756	31.30
L-400	Northwest—3	50	39	8	.05	312	1.95
L-500	Northwest—3	49-A	141	19	.17	2,679	23.97
Zero	Northwest—4	48-A	1,399	13	.03	18,187	41.97
Zero	Northwest—4	48-B	381	15	.04	5,715	15.24
L-200	Northwest—4	48-B	262	14	.03	3,668	7.86
L-200	Nueva Br. 1	31	37	11	.20	407	7.40
L-300	Rosario—2	31	141	8	.10	1,128	14.10
U-150	Salvador Br. 11	74	1,099	16	.02	17,584	21.98
Zero	Salvador Br. 11	74	444	20	.03	8,880	13.32
Zero	Salvador Br. 11	74-A	662	20	.03	13,240	19.86
L-300	Salvador Br. 11	73	58	12	.01	696	.58
L-650	San Benito—1 Br. 1	87	345	9	.11	3,105	37.95
L-500	San Benito—2	99	3,147	17	.24	53,499	755.28
L-650	San Benito—2	82	316	12	.04	3,792	12.64
L-650	San Benito—2	84	251	25	.26	6,275	65.26
L-650	Santa Fe—1	90	483	10	.18	4,830	86.94
L-400	Santa Fe—2	86	1,314	50	.60	65,700	788.40
L-500	Santa Fe—2	92	1,509	24	.23	36,216	347.07
L-500	Santa Fe—2	92-A	1,491	24	.23	35,784	342.93
L-650	Santa Fe—2	86	354	10	.11	3,540	38.94
L-400	Santa Fe—4	87	180	19	.27	3,420	48.60
L-400	Santa Fe—4	89-A	1,055	19	.27	20,045	284.85
L-500	Santa Fe—4	87	814	30	.38	24,420	309.32
L-500	Santa Fe—4	89	98	30	.33	2,940	32.34
L-650	Santa Fe—4	83	678	15	.15	10,170	101.70
L-650	Santa Fe—4	83-A	3,103	15	.17	46,545	527.51
L-650	Santa Fe—4	85	1,718	35	.40	60,130	687.20
L-650	Santa Fe—4	88	491	28	.30	13,748	147.30
L-650	Santa Fe—4	89	874	13	.15	11,362	131.10
L-100	San Joaquín	57-A	234	10	.12	2,340	28.08
L-100	San Joaquín	60	144	7	.08	1,008	11.52
L-300	South San Miguel Br. 1	56	1,270	35	.30	44,450	381.00
L-300	South San Miguel Br. 1	57	113	25	.20	2,825	22.60
U-150	Veta—4 South	63-A	305	14	.02	4,270	6.10
U-150	Veta—4 South	64	1,239	22	.04	27,258	49.56
L-300	Veta—4 South Br. 1	61	48	9	.02	432	.96
	Total Ore in Stopes		38,529	21.01	.1554	809,303	5,988.39
	Ore in Ore Passes		1,514	19	.12	28,766	181.68
	Ore in Mill Bin		369	19	.12	7,011	44.28
	GRAND TOTAL		40,412	20.91	.1538	845,080	6,214.35

SUMMARY OF ASSURED RESERVES

Estimated Ore (at 13 & 14 cu. ft. per ton)	135,707	24.21	.1957	3,285,585	26,563
Broken Ore (at 21 cu. ft. per ton)	40,412	20.91	.1538	845,080	6,214
Total Assured Reserve Jan. 1, 1953	176,119	23.45	.1861	4,130,665	32,777

ANNEX "B" — POSSIBLE ORE RESERVES

($8.75 Per Ton and Up at 75c. Silver and $35.00 Gold)

Estimated Reserves (13 & 14 cu. ft. per ton)	Avg. Vein	Width Waste	Feet Stope	Tons Ore & Waste	Avg. Troy Ozs. per ton Ag.	Au.	Total Troy Ozs. Ag.	Au.
Salvador Group								
Jucuara—1 (Fortuna)	2.43	1.07	3.50	1,620	12	.01	19,000	20
Santa Fe Group								
San Benito—2	2.45	1.05	3.50	601	17	.19	10,461	116
Santa Fe—4	3.36	1.47	4.83	21,670	9	.09	186,115	1,984
Old Mine Group								
Capitana—2	1.22	1.28	2.50	1,394	7	.11	9,792	159
Culebra—2	1.59	1.41	4.20	806	18	.05	14,535	41
Esperanza	1.06	1.94	3.00	2,226	12	.03	27,519	71
Northwest—1	1.33	1.67	3.00	499	10	.08	5,092	40
Porvenir	1.51	1.49	3.00	4,195	10	.02	42,210	99
Rosario Stringer—1	1.62	1.38	3.00	662	17	.06	11,502	41
San Joaquín	1.45	1.55	3.00	4,840	11	.21	51,387	1,029
Other Veins								
Veta—4 South	1.04	1.96	3.00	1,496	16	.02	23,846	26
TOTAL				40,009	10.03	.0900	401,459	3,600

Note on Reserves

While it is inherently probable that the tonnages and grades, when actually mined from these individual veins, will vary somewhat from these estimates, it is expected that the sum totals will shows a very close approximation to the estimate.

ANNEX "C"—Tonnage Mined from October 1, 1907 to January 1, 1953

VEINS	Total Including Stoping, Devel. & Fill Oct. 1, 1907—Dec. 31, 1951	Total Including Stoping, Devel. & Fill Year 1952	Grand Total Including Stoping Devel. & Fill to Jan. 1, 1953
Buena Ventura	101,726	723	102,449
Candelaria Group	193,096	1,235	194,331
Capitana—1	60,967	153	61,120
Capitana—2	1,220	10	1,230
Carmen—1	67,221	13	67,234
Carmen—2	2,470	.....	2,470
Catalina—1	6,587	.....	6,587
Catalina—2	8,819	733	9,552
Colonia—1	177,008	8,315	185,323
Colonia—2	2,217	.....	2,217
Colonia—3	3,364	546	3,910
Concepción	19,414	.....	19,414
Crisanta—1	18,811	195	19,006
Crisanta—2	1,735	222	1,957
Crisanta—3	2,347	181	2,528
Culebra—1	154,373	192	154,565
Culebra—2	40,466	6,488	46,954
Culebra Stringer	62,819	3,664	66,483
Esperanza	8,710	1,232	9,942
Fortuna Group	115,303	2,609	117,912
Guadalupe	63,288	134	63,422
Independencia	316,983	1,298	318,281
Jucuara—1 (Fortuna)	543,658	28,385	572,043
Jucuara—2	391,355	8,986	400,341
Jucuara—3	63,045	1,196	64,241

ANNEX "C"—*Cont'd.*

VEINS	Total Including Stoping, Devel. & Fill Oct. 1, 1907—Dec. 31, 1951	Total Including Stoping, Devel. & Fill Year 1952	Grand Total Including Stoping Devel. & Fill to Jan. 1, 1953
Jucuara—4	100,276	2,851	103,127
Jucuara—5	3,054	.....	3,054
Jucuara—6	4,541	.....	4,541
Jucuara—7	9,828	.....	9,828
Jucuara—8	8,562	.....	8,562
Jucuara—9	36,590	.....	36,590
Jucuara—10	4,558	.....	4,558
Jucuara—12	3,693	.....	3,693
Jucuara—13	7,149	.....	7,149
56 Fault Vein	17,689	710	18,399
North	4,647	.....	4,647
Northwest Group	123,588	13,094	136,682
Nueva Group	40,891	6,276	47,167
Porvenir	5,636	4,639	10,275
Rosario Main	165,265	3,202	168,467
Rosario—2	641	1,345	1,986
Rosario Stringer—1	19,186	8,361	27,547
Rosario Stringer—2	2,993	.....	2,993
Salvador	846,152	9,103	855,255
San Benito—1	152,025	2,860	154,885
San Benito—2	61,441	6,217	67,658
San Blas—1	9,083	.....	9,083
San Blas—2	31,113	2,961	34,074
San Cristobal	13	.....	13
San Joaquín	72,617	2,453	75,070
San Luis	5,845	888	6,733
San Miguel North	176,157	.....	176,157
San Miguel South Group	148,292	7,855	156,147
San Vicente	1,289	.....	1,289
Santa Fe Main	208,093	663	208,756
Santa Fe Stringer		128	128
Santa Fe—1	84,846	902	85,748
Santa Fe—2	107,421	6,979	114,400
Santa Fe—3	55,452	5	55,457
Santa Fe—4	56,417	23,177	79,594
Santa Fe—5	2,886	.....	2,886
Santa Fe—7	2,721	273	2,994
Santa Fe—8		333	333
Santa Gertrudis—1	80,016	.....	80,016
Santa Gertrudis—2	6,912	.....	6,912
Socorro	22,592	.....	22,592
Southwest—1	151,065	765	151,830
Southwest—2	26,483	.....	26,483
Southwest—3	17,687	.....	17,687
Southwest—4	10,237	.....	10,237
Southwest—5	28,879	.....	28,879
Southwest—6	10,083	.....	10,083
Southwest—7	9,804	.....	9,804
Southwest—8	581	.....	581
Southwest—9	6	.....	6
Southwest—10	14,113	.....	14,113
Southwest—11	600	.....	600
Southwest—12	2,737	.....	2,737
Termópilas	13,295	1,014	14,309
West	101,521	181	101,702
Veta—4 North	37,997	2,368	40,365
Veta—4 South	52,805	7,301	60,106
Ore from Development	63,599	.....	63,599
Miscellaneous (Fills)	132,151	3,431	135,582
TOTALS	5,790,815	186,845	5,977,660

NEPTUNE GOLD MINING COMPANY

Annual Report for the Year 1952

To the Shareholders:

Summary of the report of Mr. W. S. McCullough, General Manager, for the calendar year 1952 follows:

"Operations at the property were conducted throughout the year without interruption.

During 1952, 14,273 feet of development work were accomplished, of which 7,011 feet, or 49 percent were in ore. In addition, 5,791 feet of diamond drilling were completed.

Production figures for the year 1952 compared with 1951 are:

Year	Tons Milled	Average Ozs. Gold per Ton	Contents of Bullion Produced and Shipped	
			Ozs. Gold	Ozs. Silver
1951	260,000	0.307	73,923	86,769
1952	257,700	0.315	75,334	96,768

NOTE: In addition to the bullion production, gold-silver matte produced and shipped to the refinery in 1952 contained 289 ounces gold and 39,417 ounces silver, as compared with matte produced in 1951 which contained 159 ounces gold and 15,798 ounces silver.

The estimated total of assured, probable and prospective ore as of December 31, 1952 is 1,173,620 tons, averaging 0.307 ounces gold per ton. This compares with 1,274,810 tons, averaging 0.308 ounces gold per ton as of December 31, 1951.

Operating costs were slightly greater than in 1951 attributable to increased costs of labor, supplies and transportation. Due to higher prices for supplies, the value of warehouse stocks increased from $1,139,117.86 as of December 31, 1951, to $1,302,073.45 as of Deceber 31, 1952."

The Directors express their appreciation to Mr. McCullough and his staff on the results achieved during the year.

During 1952, there was paid to the Government of Nicaragua the sum of $242,299.00, representing export taxes on production in accordance with the terms of the Company's concession agreement, miscellaneous taxes, fees and custom duties.

The Government of Nicaragua has enacted an income tax law which became effective January 1, 1953. Pending the issuance of regulations in connection with this law, it is im-

possible to forecast what effect this tax will have on the net income of your Company.

Four dividends aggregating $14.00 per share, a total of $280,000.00, were paid during 1952.

The earnings from mine operations of the Company for the year 1952 before provisions for depreciation and depletion and United States income tax were $521,547.87. Earnings were adversely affected by a smaller amount of premium per ounce of gold sold in the foreign market as compared with premium obtained during 1951.

Balance Sheet as of December 31, 1952 and Statement of Income and Earned Surplus for the year 1952 are included in this report.

Respectfully submitted,

R. F. GOODWIN,
President.

March 12, 1953.

NEPTUNE GOLD MINING COMPANY

Balance Sheet as of December 31, 1952

Assets

Currents Assets:		
Cash on hand and in banks		$ 464,278.53
Unliquidated bullion (conservatively valued based on mine assay)		600,018.83
Accounts receivable		25,723.61
Materials and supplies — including construction materials (at average cost)		1,302,073.45
TOTAL CURRENT ASSETS		$2,392,094.42
Unexpired Insurance		76,191.78
Mining Property, Options, Preproduction Costs, Buildings and Equipment — at cost	$4,081,397.26	
Less reserves for depreciation and depletion	3,333,554.82	747,842.44
TOTAL		$3,216,128.64

Liabilities

Current Liabilities:	
Accounts and drafts payable	$ 131,532.90
Accrued payrolls and other expenses	73,622.57
Accrued U. S. income tax	31,810.17
TOTAL CURRENT LIABILITIES	$ 236,965.64
Employer's Liability Reserve	24,710.73
Capital Stock (without par value) — authorized and outstanding 20,000 shares	10,000.00
Earned Surplus	2,944,452.27
TOTAL	$3,216,128.64

NEPTUNE GOLD MINING COMPANY

Statement of Income and Earned Surplus
For the Year ended December 31, 1952

Value of bullion produced, less marketing expenses	$2,750,168.96
Operating and general expenses	2,228,621.09
Earnings from mine operations	$ 521,547.87
Provisions for depreciation and depletion	237,123.79
Income before U. S. income tax	$ 284,424.08
Less U. S. income tax — estimated	29,500.00
Net income	$ 254,924.08
Earned surplus, January 1, 1952	2,969,528.19
TOTAL	$3,224,452.27
Dividends declared and paid in 1952 ($14.00 per share)	280,000.00
Earned surplus, December 31, 1952	$2,944,452.57

Auditor's Certificate

Neptune Gold Mining Company:

We have examined the balance sheet of Neptune Gold Mining Company as of December 31, 1952 and the related statement of income and earned surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such test of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statement of income and earned surplus present fairly the financial position of the Company at December 31, 1952 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

HASKINS & SELLS

New York,
March 9, 1953

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NEW YORK AND HONDURAS ROSARIO MINING COMPANY

77th

ANNUAL REPORT

FOR THE YEAR ENDED DECEMBER 31,

1957

NEW YORK AND HONDURAS ROSARIO MINING COMPANY

Executive Office

120 Broadway
New York 5, N. Y.

General Manager's Office

MINAS EL MOCHITO
c/o Agencia Rosario
Tegucigalpa, D. C.
Honduras, C. A.

ROSARIO EXPLORATION COMPANY

Operating Office

212 Electric Building
Grand Junction, Colorado

EXPLORACIONES ROSARIO, S. A.

Apartado 4566
Panama, R. P.

Transfer Agent

Chemical Corn Exchange Bank
New York, N. Y.

Registrar

Irving Trust Company
New York, N. Y.

Auditors

Ernst & Ernst
New York, N. Y.

General Counsel

Reeves, Todd, Ely & Beaty
New York, N. Y.

NEW YORK AND HONDURAS ROSARIO MINING COMPANY

OFFICERS

R. M. REININGER, *President*

LEWIS L. CLARKE, *Chairman of the Board of Directors*

H. I. ALTSHULER, *Vice-President*

G. E. McDANIEL, *Secretary and Treasurer*

JULIAN B. BEATY, *Assistant Secretary*

BOARD OF DIRECTORS

LEWIS L. CLARKE, *Chairman*

H. I. ALTSHULER

JULIAN B. BEATY

DR. J. RALPH JACOBY

HERBERT A. KAUFMANN

W. C. LANGLEY

LLOYD M. McMILLEN

SAMUEL R. MILBANK

R. M. REININGER

RICHARD H. VALENTINE

PRESIDENT'S REPORT

March 21, 1958.

To The Stockholders of
New York and Honduras Rosario Mining Company:

This is the Seventy-seventh Annual Report of your Company, covering a year of challenge and of achievement. It is a pleasure to report to you further progress and growth through our exploration program as well as our increasingly important development of El Mochito Mine.

Earnings for 1957 were below those of the previous year, principally because of lower metal prices and increased costs, particularly the cost of completion of the 11,000 foot Raíces Drainage and Development Tunnel, and the record development and diamond drilling work accomplished at El Mochito Mine during the year. This work has had highly gratifying results which substantially improved ore reserves and the growth potential of El Mochito Mine. Essential details from the report of the General Manager on the Company's Honduras operations are set forth on pages 14 to 19.

El Mochito Mine (Honduras)

In addition to the above El Mochito developments in 1957, tonnage mined and milled increased for the third consecutive year. Development of the Main orebody and the Nueva orebody on the new 725 foot level proceeded satisfactorily during the year, contributing to the ore reserve increase. Shaft No. 3 was completed to the 650 foot level. Additional roasting process equipment was installed in the fourth quarter and will be in full operation during the first quarter of 1958.

Expansion plans for 1958 include commencement of our shaft sinking and deep development program, sinking No. 3 shaft

from the 650 to the 1,000 foot level, followed by development of the orebodies on the 850 and 1,000 foot horizons. The amount of water to be handled at the deeper levels will be the main factor in the program's rate of progress. A cyanide regeneration plant, a new concentrate drying plant and additional crushing equipment are among the capital additions scheduled for completion during the second quarter of 1958.

The expansion of El Mochito operations presents numerous problems. These problems will be aggressively and confidently met by all of the Rosario organization.

Neptune Gold Mining Company (Nicaragua)

The Annual Report of this Company, in which we own a 28.05% stock interest, is presented on Page Nos. 20 to 23. Dividends of $5.50 per share were paid by Neptune for the year 1957, compared with $17.00 per share in 1956, representing a revenue to Rosario of $30,855.00 in 1957 compared with $95,370.00 in 1956.

The Neptune Gold Mining Company has also voted a first quarter dividend of $2.50 per share payable March 30, 1958.

Exploraciones Rosario, S. A., (Panama)

A joint venture project to develop high grade, limited tonnage manganese deposits in the Republic of Panama continued under the Company's subsidiary, Exploraciones Rosario, S. A. Construction work was started in March, 1957, on a 26 mile haulage road from the Trans-Isthmian highway to the property under difficult jungle terrain and adverse weather conditions. Plans for mining and shipping during the 1958 dry season, normally January to June, were severely hampered by the unseasonable and excessive rains so far in 1958. Despite these hardships to date the initial ore shipment was made March 15, 1958.

Production and shipment from Panama at a sastifactory rate is contingent upon dry weather and improvement in the presently depressed manganese market.

Yorcan Exploration Ltd.
Campbell Chibougamau Mines Ltd.

Yorcan Exploration Ltd., of which your Company holds a 25% stock interest, has received 506,667 shares of capital stock of Campbell Chibougamau Mines Ltd. in exchange for all of Yorcan's assets including mining claims. Yorcan plans to distribute the above shares and when the transaction is completed your Company will receive and hold 127,697 shares of Campbell Chibougamau Mines Ltd. capital stock. The recent quoted price of approximately $5.00 a share for Campbell Chibougamau Mines Ltd. stock on the American Stock Exchange results in a total current market value of approximately $638,485 for these shares. Your Company is carrying this investment on its books at a cost of $187,861

The drilling program conducted jointly by Yorcan and Campbell during early 1957 resulted in locating the Henderson Orebody with an estimated 4,700,000 tons of ore averaging over 2% copper and containing important gold values. Recent drilling by Campbell on a new anomaly 1,200 feet north of the Henderson Orebody has encountered a potential new ore zone.

Your Company's president was elected a director of Campbell Chibougamau Mines Ltd. at their annual stockholders' meeting held October 29, 1957.

Exploration Program

The exploration, geophysical and drilling work in the Chibougamau area was continued during 1957. In accordance with the terms of an option agreement a subsidiary known as Lempira

Mines, Ltd. was formed for the purpose of continuing exploration work on the CN-3 group of 30 claims in the Chibougamau area. Your Company now holds 63 per cent of the outstanding shares of this company. Geophysical surveys have been conducted on these claims and some diamond drilling has been completed with interesting, although to date inconclusive, results. Additional drilling is now under way to test anomalies indicated by the geophysical surveys.

Your Company also controls a group of 44 claims in Guettard Township in the Chibougamau area in Quebec. A geophysical survey conducted in the fall of 1957 disclosed several anomalies which are of interest. Test drilling on major anomalies is planned during the summer of 1958.

During the year your Company, through its subsidiary Rosario Exploration Company, continued examination of mineral properties in the western states. Since assistance from the Defense Minerals Exploration Administration was not obtained for exploring the uranium deposit discovered on the Daisy claims near Green River, Utah, additional drilling was undertaken by Rosario Exploration Company. An additional 22 holes were drilled and although considerable mineralization was disclosed by the drilling, ore channels were indicated to be narrow and drilling operations were suspended pending further geological and engineering studies.

Financial

Net income for the year 1957 amounted to $358,017 equal to $3.80 per share on the 94,109 shares of Capital Stock outstanding at December 31, 1957 compared with 1956 net income of $509,296 or $5.43 per share on the 93,749 shares outstanding at December 31, 1956.

Dividends declared from earnings for the year 1957 amounted to $258,382.25 or $2.75 per share.

On behalf of the Board of Directors I extend our appreciation to Rosario shareholders for their splendid support and our thanks to the people of the Rosario organization whose enthusiastic and capable work is greatly responsible for the progress of the past year and the encouraging outlook for the future. With continued full production and no further serious decline in the current metal prices, we look forward to increased earnings in 1958.

Respectfully submitted,

R. M. REININGER,
President.

REPORT OF AUDITORS

To the Stockholders,
New York and Honduras Rosario Mining Company,
New York, New York.

We have examined the consolidated financial statements of New York and Honduras Rosario Mining Company and its subsidiaries for the year ended December 31, 1957. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures at the New York and mine offices as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statement of income and retained earnings present fairly the consolidated financial position of New York and Honduras Rosario Mining Company and its subsidiaries at December 31, 1957, and the consolidated results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST

New York, N. Y.
March 19, 1958.

ASSETS

CURRENT ASSETS		
Cash		$ 342,585.65
Bullion and concentrates—at selling price less expenses (since realized)		418,671.64
Marketable securities—at cost (quoted market $1,775,377.13)		1,431,774.47
Accounts receivable, less allowance of $8,566.72		107,306.43
Inventories of materials and supplies—at cost, not in excess of replacement cost		670,019.02
Prepaid expenses		25,038.82
	Total Current Assets	$2,995,396.03
INVESTMENTS		
In other mining companies and mining claims and options, at cost—Note A:		
Neptune Gold Mining Company	$ 2,621.40	
Yorcan Exploration Limited	187,861.43	
Exploraciones Rosario, S. A.	158,688.53	
Lempira Mines, Ltd.	105,317.17	
Mining claims and options, less allowances	8,752.37	
	$ 463,240.90	
United States Treasury 2¾% Bonds, nontransferable, exchangeable for marketable 1½% Treasury Notes—at cost	311,140.63	
Other—at cost	16,000.00	790,381.53
MINING PROPERTY, PLANT, AND EQUIPMENT		
At cost	$1,911,142.89	
Less allowances for depletion and depreciation	1,204,305.22	706,837.67
		$4,492,615.23

See notes to financial statements.

Mining Company and Subsidiaries

BALANCE SHEET

31, 1957

LIABILITIES

CURRENT LIABILITIES

Accounts payable and accrued expenses		$ 106,930.27
Dividend payable on January 3, 1958		70,581.75
Taxes on income		163,000.00
	Total Current Liabilities	$ 340,512.02

RESERVE

For severance pay and workmen's compensation contingencies		52,966.38

STOCKHOLDERS' EQUITY

Capital Stock, par value $10.00—Note B:			
Authorized and issued	188,367 shares	$1,883,670.00	
Held in treasury	94,258 shares	942,580.00	
Outstanding	94,109 shares	$ 941,090.00	
Capital surplus—Note C		6,056.20	
Retained earnings (restricted in the amount of $942,580.00 representing par value of Capital Stock in treasury)		3,151,990.63	4,099,136.83

CONTINGENT LIABILITY—Note D

$4,492,615.23

New York and Honduras Rosario Mining Company and Subsidiaries

STATEMENT OF CONSOLIDATED INCOME AND RETAINED EARNINGS

Year ended December 31, 1957

Income from production of bullion and concentrates, less freight and other expenses of $473,288.55		$2,027,642.10
Income from investments — Note A		108,438.52
Other income		74,156.35
		$2,210,236.97
Less:		
Mine operating expenses	$1,167,382.74	
Depreciation of mine plant and equipment	169,319.23	
Raices drainage and development tunnel costs	219,307.75	
New York administrative expenses	160,388.12	
Write-down of mining options	31,757.02	
Other expenses	64,725.27	
Taxes on income — estimated	68,000.00	
	$1,880,880.13	
Deduct adjustment of prior years' depreciation to conform to basis agreed upon with Internal Revenue Service	28,660.32	1,852,219.81
NET INCOME		$ 358,017.16
Retained earnings at January 1, 1957		3,039,262.52
Portion of proceeds from sale of treasury stock representing excess of purchase cost over par value		13,093.20
		$3,410,372.88
Less dividends declared — $2.75 a share		258,382.25
RETAINED EARNINGS AT DECEMBER 31, 1957		$3,151,990.63

Provision for depreciation for the year, including that shown separately in the above figures, amounted to $197,304.58.

See notes to financial statements.

New York and Honduras Rosario Mining Company and Subsidiaries

NOTES TO FINANCIAL STATEMENTS

December 31, 1957

Note A — INVESTMENTS IN OTHER MINING COMPANIES

Neptune Gold Mining Company — 5,610 shares of capital stock:

The equity (28.05%) in the net assets of this company at December 31, 1957, was $487,900.73 in excess of cost; the equity in its net income for the year was $25,050.89; and dividends received in 1957 were $30,855.00.

Yorcan Exploration Limited — 510,790 shares of capital stock representing a 25.2% interest:

In November 1957, Yorcan acquired 506,667 shares, representing a 14.3% interest at December 31, 1957, of Campbell Chibougamau Mines Ltd. in exchange for all of Yorcan's assets. Yorcan plans to distribute these shares to its stockholders and upon such distribution the New York and Honduras Rosario Mining Company will receive for its interest in Yorcan 127,697 shares of capital stock of Campbell. The stock of Campbell was quoted on March 18, 1958 on the American Stock Exchange at approximately $5 per share.

Exploraciones Rosario, S. A., a wholly-owned Panamanian subsidiary, party to a joint venture for development of manganese claims in Panama — capital stock ($10,000.00) and advances ($148,688.53):

This company has not been consolidated in the financial statements as its activities to the end of 1957 consisted principally of development and preparation for mining.

Lempira Mines, Ltd., a Canadian company — 850,000 shares of capital stock representing a 63% interest:

This company was formed during 1957 and its activities to the end of the year were exploratory.

Note B — RESTRICTED STOCK OPTION PLAN

During the year 1957 purchases of capital stock by officers and employees under a five-year stock option plan adopted in 1955 totaled 360 shares at a cost of $18,074.00, the market values of which at the exercisable dates aggregated $21,743.75. No charges to income were made with respect to the options exercised. At December 31, 1957, there were 5,891 shares in treasury reserved for future issuance under the plan.

Note C — CAPITAL SURPLUS

There was an increase of $1,380.80 in capital surplus during the year 1957 representing the portion of proceeds from sale of treasury stock to employees, under the stock option plan, over purchase cost.

Note D — CONTINGENT LIABILITY

The Internal Revenue Service in its review of the Company's federal income tax returns for the years 1951 to 1953, inclusive, has expressed the view that the Company is not entitled to classification as a Western Hemisphere trade corporation because, in its interpretation of the Internal Revenue Code of 1939, some incidental, insignificant purchases of supplies outside the Western Hemisphere constituted a disqualification. This issue is not pertinent for years subsequent to 1953.

Upon request, waivers have been signed by the Company extending the time for final determination of the Company's tax status. There is pending in the Tax Court a case concerning the status of a certain other taxpayer where the issues may have some similarities.

If the Internal Revenue Service makes a final determination adverse to the Company's position, the Company would have an additional tax liability of approximately $400,000.00, exclusive of interest, for which no provision has been made in the accompanying financial statements. In the event an assessment of taxes is made on the basis of such adverse determination, it is planned to contest such action in the courts.

New York and Honduras Rosario Mining Company and Subsidiaries

MARKETABLE SECURITIES

December 31, 1957

	Principal Amount	Cost	Market
UNITED STATES GOVERNMENT SECURITIES:			
Treasury Notes, 1⅞%, due February 15, 1959	$ 200,000.00	$ 198,312.50	$ 198,125.00
Treasury Bonds, 2¼%, due September 15, 1959/1956	150,000.00	150,960.94	148,406.25
Certificates of Indebtedness, 3⅜%, due February 14, 1958	500,000.00	499,546.88	500,781.25
Federal National Mortgage Association Notes, 2½%, due January 20, 1958	150,000.00	150,468.75	149,859.38
Total United States Government securities	$1,000,000.00	$ 999,289.07	$ 997,171.88
LOCAL HOUSING AUTHORITY TEMPORARY LOAN NOTES: (Payment on principal and interest guaranteed by the United States Public Housing Authority):			
2.50% New York City Housing Authority, due January 15, 1968	$ 50,000.00	$ 50,000.00	$ 50,000.00
DOMESTIC CORPORATION STOCKS:	No. of Shares		
American Can Company, 7% cumulative preferred stock	1,000	$ 45,048.41	$ 40,500.00
American Chicle Company, common stock	1,320	18,460.00	82,170.00
Atlas Powder Company, common stock, voting	200	10,855.78	11,500.00
California Water Service Company, common stock	250	8,625.00	10,250.00
Carolina Power and Light Company, common stock	1,821	25,913.40	45,980.25
Food Machinery & Chemical Corporation, common stock	200	9,753.38	9,475.00
General Motors Corporation, common stock	315	10,607.69	10,552.50
Home Insurance Company (New York), capital stock	1,000	32,435.70	34,000.00
Indiana Gas & Water Company, common stock	210	1,584.45	3,465.00
Iowa Southern Utilities Company, common stock	1,500	26,339.29	31,312.50

New York and Honduras Rosario Mining Company and Subsidiaries

MARKETABLE SECURITIES — Continued

December 31, 1957

	No. of Shares	Cost	Market
DOMESTIC CORPORATION STOCKS — Continued:			
Phelps Dodge Corporation, capital stock	200	$ 11,081.00	$ 7,725.00
Public Service Company of Indiana, Inc., common stock	619	6,281.97	23,212.50
San Jose Water Works, common stock	250	10,000.00	11,000.00
Shell Oil Company, common stock	220	12,207.12	14,960.00
Socony Mobil Oil Company, Inc., capital stock	773	11,669.19	36,717.50
Southern Pacific Company, common stock	200	11,030.96	6,800.00
Standard Oil Company of California, capital stock	2,430	18,762.14	111,476.25
Standard Oil Company (New Jersey), capital stock	3,330	32,961.44	166,083.75
Union Carbide Corporation, capital stock	200	16,861.78	19,000.00
United Fruit Company, capital stock	200	10,480.40	7,025.00
Westinghouse Electric Corporation, cumulative preferred stock 3.80% Series B	500	51,526.30	45,000.00
Total domestic corporation stocks		$ 382,485.40	$ 728,205.25
TOTAL MARKETABLE SECURITIES		$1,431,774.47	$1,775,377.13

GENERAL MANAGER'S REPORT

December 31, 1957

To the Officers and Directors of the
New York and Honduras Rosario Mining Company
120 Broadway
New York 5, N. Y.

Gentlemen:

The following report is submitted covering operations at your properties in Honduras during the year 1957.

EL MOCHITO MINES (HONDURAS)

GENERAL

Mining and milling operations continued without interruption throughout the year. Tonnage processed increased by 14% over the previous year resulting in a record metal production. Recoveries were lower for all metals because of an increase in the proportion of the refractory ores treated. Operating costs increased because of heavier expenditures for development, higher labor and supply costs, and because of the increased cost of treating the refractory ores.

Labor relations continued good and the Company continued its policy of providing improved living facilities for the workmen. On December 21, 1957, a 44 hour work week became law throughout the country, replacing a former 48 hour work week. While the effect is an immediate increase in labor costs, steps are being taken to offset the increase by means of increased efficiency through mechanization.

THE MINE

Ore Reserves

Exploration of the Nueva Orebody at depth by means of diamond drilling resulted in a substantial increase in the ore reserves. This oreshoot has now been shown to extend to at least the 1,430 foot level. Although no new orebodies of importance were discovered during the year, several ore occurrences were cut by the Raices Tunnel which call for investigation in the year to come and stand a good chance of leading to an orebody or orebodies in a totally new area of the mine from that which has been exploited in the past.

Comparative Summary — Ore Reserves

		Average Grade		Total Ounces		Lead	Zinc
ASSURED	Tons	Oz. Ag.	Oz. Au.	Ag.	Au.	Tons	Tons
Dec. 31, 1957	193,340	36.88	.034	7,129,578	6,610	10,015	10,757
Dec. 31, 1956	201,004	36.39	.033	7,314,672	6,599	8,840	10,157
INCREASE — (DECREASE)	(7,664)	.49	.001	(185,094)	11	1,175	600
PROBABLE							
Dec. 31, 1957	553,996	19.30	.017	10,690,200	9,214	31,837	44,563
Dec. 31, 1956	134,671	22.69	.204	3,056,187	2,745	5,408	6,041
INCREASE — (DECREASE)	419,325	(3.39)	.187	7,634,013	6,469	26,429	38,522
GRAND TOTAL							
Dec. 31, 1957	747,336	23.84	.021	17,819,778	15,824	41,852	55,320
Dec. 31, 1956	335,675	30.90	.028	10,370,859	9,344	14,248	16,198
INCREASE — (DECREASE)	411,661	(7.06)	(.007)	7,448,919	6,480	27,604	39,122

The arbitrary reduction in tonnage and grade used computing ore reserves in prior years has been shown by experience to be in excess of normal conservative practice. The ore reserves for the year ended December 31, 1957 have been computed in conformance with present actual mining experience and generally accepted engineering practice. For the purpose of comparison the ore reserves for the year ended December 31, 1956 have been adjusted to the same basis used in computing the 1957 reserves.

Reserves of assured and probable ore increased by 411,661 tons containing 7,448,919 ounces of silver, 6,480 ounces of gold, 27,604 tons of lead and 39,122 tons of zinc.

The extension of the Nueva Orebody at depth, which is responsible for the increase to Probable Reserve, is of lower grade than average grade. However, preliminary metallurgical tests indicate that this ore can be treated by cheaper methods than used at present and with a much better recovery.

Mine Production

Tons mined amounted to 72,461 with an average grade of 37.7 ounces of silver per ton. Of this, 1,884 tons of selected high grade ore were sacked and shipped directly to the smelter without processing.

Approximately 32.2% of the ore mined came from assured reserves in the main orebody, 35.2% from other assured reserves, and 32.6% from exploration, development and ore not on reserves.

Development and Exploration

Year	Drifts and Crosscuts	Raises, Shafts and Winzes	Total Feet	Diamond Drilling
1957	11,639	5,337	16,976	15,400
1956	11,176	3,974	15,150	11,872
INCREASE	463	1,363	1,826	3,528

Exploration and Development Program for 1958

It is felt that the principal effort should be directed to the development of the Nueva Orebody at depth, aside from essential development on the 725 Level. For this reason it is planned to restrict all other development and exploration to a few main headings and drill holes directed into ground where an ore discovery would be of major significance.

1) Sink No. 3 Shaft to the 1000 Level and there crosscut to the Nueva Orebody with the dual purpose of developing the ore and determining the amount of water which must be handled to exploit future lower levels.

2) Continue XC-9605 NW, Zero Level to crosscut the Lime Kiln Fault and geophysical anomalies.

3) Drive on ore showings cut by Raices Tunnel.

Raices Tunnel

The tunnel was connected to the mine workings on December 10, 1957 on line and on grade. Several ore occurrences were cut which while not orebodies in themselves stand an excellent chance of making ore if followed. The distance driven during the year was 4,949 feet. It is expected that the tunnel will be handling all mine drainage, with consequent reduction in pumping expense, early in 1958.

THE MILL

The amount of ore processed, including ore shipped, increased to 71,350 tons, a 14% increase over the 1956 figure. Ore actually milled came to 67,158 tons, also representing a 14% increase. The average grade of the ore milled, dropped from 36.3 oz. Ag. per ton to 32.5 oz. largely because some of the highest

grade ore from the mine was shipped to the smelter instead of being milled as had been the practice prior to November 1956. Metal recoveries in the mill were also lower because of the more refractory character of the ore, although in this connection it should be noted that without the roasting plant much of this ore could not have been economically treated. The silver recovery in the mill was 77.6% compared to 81.3% for 1956, based on the contents of the ore calculated from production plus tailing.

Additions to mill equipment during the year, referred to in last year's report, are reported under the heading of "Construction." Only a second Pachuca agitator installation remains to be finished. The larger roaster and increased capacity in the refractory ore circuit has required some additions to the refractory ore dressing plant which will be completed early in 1958.

Increased production has required the installation of a larger concentrate plant which will be in operation early in 1958. Also, the erection of a cyanide regeneration plant has been commenced which will result in a lowering in cyanide cost.

Bullion, Concentrate and Sorted Ore Production

	Ag. Ozs.	Au. Ozs.	Pb. Tons	Zn. Tons
Sorted Ore	568,169	462	384	206
Mixed Concentrates	906,143	739	2,481	1,758
Bullion	733,588	899	.....	.....
	2,207,900	2,100	2,865	1,964

Tons Treated Including Sorted Ore Through December 31, 1957

Years 1948/1956	Year 1957	Total December 31, 1957
378,224	71,350	449,574

Total Production to Date — Silver and Gold

Net Troy Ozs. Years 1948/1956 Incl.		Net Troy Ozs. Year 1957		Total Net Troy Ozs. December 31, 1957	
Ag.	Au.	Ag.	Au.	Ag.	Au.
11,099,652	8,291	2,207,900	2,100	13,307,552	10,391

Total Production to Date — Lead

Net Tons Years 1948/56	Net Tons Year 1957	Total Net Tons December 31, 1957
9,022	2,865	11,887

Operating Statistics

Years Ended December 31, 1957, and December 31, 1956

	1957	1956	Increase (Decrease)
Number of men employed per workday	586	566	20
Tons of ore mined	72,461	63,204	9,257
Tons of ore processed	69,730	59,660	10,070
Tons of ore milled	67,158	58,949	8,209
Average tons milled per day, full running time	194	169	25
Metal recoveries - percentages:			
Silver	78.63%	79.40%	(0.77%)
Gold	79.22%	75.28%	3.94%
Lead	54.08%	51.78%	2.30%
Metals recovered:			
Ounces of silver	2,107,915	1,836,636	271,279
Ounces of gold	1,908	1,554	354
Pounds of lead	4,583.721	3,766,475	817,246
Sales value of metals recovered:			
Silver	$1,907,130	$1,671,043	$236,087
Gold	$ 66,602	$ 54,252	$ 12,350
Lead	$ 527,199	$ 507,641	$ 19,558
Average net selling price:			
Ounce of silver	$ .90	$ .91	($ .01)
Ounce of gold	$ 34.91	$ 34.91	—
Pound of lead	$ .12	$ .13	($ .01)
Metals recovered per ton of ore processed:			
Ounces of silver	30.23	30.79	(.56)
Ounces of gold	.027	.026	.001
Pounds of lead	65.73	63.13	2.60

CONSTRUCTION

Construction projects completed during the year include a 60 ton per day roaster, larger secondary ball mill and classifier, a larger bank of flotation cells, a 2,100 cubic feet per minute mill compressor, a vibrating screen, an additional Pachuca agitator, a lime bin, a mine lamp house, an additional staff dwelling, a geology office, an extension to the warehouse, and a mile long gravity water supply line to the mill with an extension also a mile long leading up to the mine.

OUTSIDE EXPLORATION

Examinations of outside mineral prospects during the year within Honduras did not result in any properties of economic interest.

COMPANY STAFF

I wish to thank the members of the staff for their loyalty and cooperation in combating the many problems which arose during the past year and at the same time to thank the Officers of the Company, the Board of Directors and the Staff of the New York Office for their continued and helpful assistance.

Respectfully submitted,

E. T. KNIGHT,
General Manager.

NEPTUNE GOLD MINING COMPANY

Annual Report for the Year 1957

To the Shareholders:

Summary of the report on operations by Mr. W. S. McCullough, General Manager, for the calendar year 1957 follows:

"Operations at the property were conducted throughout the year without interruption.

There were 7,628 feet of development headings driven in 1957, of which 4,151 feet, or 54.4% were in ore. In addition 5,266 feet of exploratory diamond drilling were completed.

Production figures for the year 1957 compared with 1956, are:

Year	Tons Milled	Average Ozs. Gold Per Ton	Contents of Bullion Produced and Shipped Ozs. Gold	Ozs. Silver
1956	262,600	0.305	75,087	96,227
1957	259,600	0.308	74,843	105,129

NOTE: In addition to the bullion production, gold-silver matte produced and shipped to the refinery in 1957 contained 93 ounces gold and 33,681 ounces silver, as compared with matte produced in 1956, which contained 41 ounces gold and 32,653 ounces silver.

The estimated total of assured and probable ore as of December 31, 1957 is 807,800 tons, averaging 0.313 ounces of gold per ton. This total compares with 975,455 tons, averaging 0.306 ounces of gold per ton as of December 31, 1956.

Operating costs increased from $8.78 in 1956 to $9.45 per ton milled for the year 1957. The value of warehouse stocks increased from $823,738 as of December 31, 1956 to $876,419 as of December 31, 1957."

The Directors express their appreciation to Mr. McCullough and his staff for the results achieved during the year.

All gold produced in 1957 was sold at the United States Mint official price of $34.9125 per ounce.

During 1957, there was paid to the Government of Nicaragua the sum of $230,434, representing export taxes on production in accordance with the terms of the Company's concession agreement, miscellaneous taxes, fees and customs duties. An amount of $7,100 has been reserved for payment of the United States and Nicaraguan income taxes.

The earnings from mine operations of the Company for the year 1957 before provision for depreciation, depletion and Nicaraguan income taxes were $186,421.

Dividends totaling $110,000 were paid during 1957, as follows:

Date	Payment Per Share
March 29	$ 3.00
June 28	1.50
December 31	1.00
	$ 5.50

Balance Sheet as of December 31, 1957 and Summary of Income and Earned Surplus for the year 1957 are included in this report.

Respectfully submitted,

ADIN A. BROWN,
President.

March 21, 1958.

NEPTUNE GOLD MINING COMPANY

Balance Sheet as of December 31, 1957

Assets

Current Assets:		
Cash on hand and in banks		$ 135,293
U. S. Treasury bills (at cost)		297,256
Unliquidated bullion (conservatively valued based on mine assay)		359,934
Accounts receivable		33,772
Materials and supplies — including construction materials (at average cost)		876,419
Prepaid insurance		44,014
TOTAL CURRENT ASSETS		1,746,688
Property:		
Mining Property, Buildings and Equipment — at cost	$4,240,495	
Less reserves for depreciation and depletion	3,996,487	244,008
TOTAL		$1,990,696

Liabilities

Current Liabilities:	
Accounts and drafts payable	$ 131,449
Accrued payrolls and other expenses	70,794
Accrued U. S. and Nicaraguan income taxes	8,590
TOTAL CURRENT LIABILITIES	210,833
Employer's Liability Reserve	31,121
Capital Stock (without par value) — authorized and outstanding 20,000 shares	10,000
Earned Surplus	1,738,742
TOTAL	$1,990,696

NEPTUNE GOLD MINING COMPANY

Summary of Income and Earned Surplus
For the Year ended December 31, 1957

Value of bullion produced, less marketing expenses	$2,607,181
Operating and general expenses	2,420,760
Earnings from mine operations	186,421
Provisions for depreciation and depletion	99,669
	86,752
Interest on U. S. Treasury bills	9,656
Income before taxes on income	96,408
Provision for U. S. and Nicaraguan taxes on income	7,100
Net income	89,308
Earned surplus, January 1, 1957	1,759,434
TOTAL	1,848,742
Dividends declared and paid in 1957 ($5.50 per share)	110,000
Earned surplus, December 31, 1957	$1,738,742

Auditors' Certificate

Neptune Gold Mining Company:

We have examined the balance sheet of Neptune Gold Mining Company as of December 31, 1957 and the related summary of income and earned surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and summary of income and earned surplus present fairly the financial position of the Company at December 31, 1957 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

HASKINS & SELLS

New York,
February 27, 1958